

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF PENNSYLVANIA

FREE SPEECH COALITION, INC.,	)	
et al.,	)	Case No. 09-CV-4607
	)	
Plaintiffs,	)	
vs.	)	
THE HONORABLE ERIC HOLDER, JR.,	)	
in his Official Capacity as	)	Philadelphia, PA
Attorney General of the United	)	June 17, 2013
States, et al.,	)	9:16 a.m.

TRANSCRIPT OF TRIAL  
BEFORE THE HONORABLE MICHAEL M. BAYLSON  
UNITED STATES DISTRICT JUDGE

APPEARANCES:

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I N D E X

<u>WITNESS</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>REDIRECT</u>	<u>RECROSS</u>
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FOR THE GOVERNMENT

Dr. Biro	14 (Bla)	44 (Mur)	62 (Bla)	69 (Mur)
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Voir Dire	3 (Bla)			
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Dr. Stark	77 (Swi)	96 (Mur)	113 (Swi)	115 (Mur)
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Voir Dire	71 (Swi)			
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Biro - Voir Dire

3

1 (The following was heard in open court at 8:50 a.m.)

2 THE COURT: I hope you had a nice weekend. Today  
3 looks like our last day of trial. So, once again, I  
4 appreciate everybody being so prepared. Please be seated.  
5 And call your next -- now we're going to have -- the  
6 Government's going to call two witnesses today?

7 Mr. BLADUELL: Yes, Your Honor.

8 THE COURT: All right. Let's go.

9 Mr. BLADUELL: The Government calls Dr. Francis Biro  
10 to the stand.

11 THE CLERK: Raise your right hand,

12 FRANCIS BIRO, GOVERNMENT WITNESS, AFFIRMED

13 THE CLERK: Please state your full name for the  
14 record, spelling your last name.

15 THE WITNESS: Francis Michael Anthony Biro, B-I-R-O.

16 THE CLERK: Thank you very much.

17 THE COURT: Janice -- one second.

18 (Pause)

19 THE COURT: Go ahead.

20 VOIR DIRE EXAMINATION

21 BY MR. BLADUELL:

22 Q Good morning, Dr. Biro.

23 A Good morning.

24 Q Dr. Biro, could you tell us where do you work?

25 A I work at Cincinnati Children's Hospital Medical Center.

1 Q And can you briefly describe your educational background?

2 A Undergraduate was at Drexel, medical school was at  
3 Harvard Medical. I completed a combined residency in internal  
4 medicine and pediatrics at the University of Rochester. And I  
5 did a fellowship in adolescent medicine at Boston Children's.

6 THE COURT: What kind of medicine?

7 THE WITNESS: Adolescent medicine, sir.

8 BY MR. BLADUELL:

9 Q And are you Board Certified?

10 A I am Board Certified in internal medicine, in pediatrics  
11 and in adolescent medicine.

12 Q And what is your position at the University of Cincinnati  
13 Children's Hospital?

14 A So at the Children's Hospital, I'm the director of  
15 adolescent medicine. And at the University of Cincinnati I'm  
16 a professor of pediatrics.

17 Q Okay. And how long have you been the director of the  
18 Division of Adolescent Medicine?

19 A On and off, approximately 10 years. In the past -- in  
20 the immediate past, six to seven years.

21 Q How long have you been a professor at the University of  
22 Cincinnati?

23 A I believe I've been a professor probably 16 or 18 years.  
24 I'd have to look at my CV to be exact.

25 Q Well let's go -- it's Exhibit Number 173. Attachment A.

Biro - Voir Dire

5

1 Is on the screen in front of you is that an accurate -- is  
2 that your CV?

3 A Yes, it is.

4 Q Okay.

5 A Fourteen years a professor. Thank you.

6 Q Okay.

7 Mr. BLADUELL: Your Honor, I move to admit Exhibit  
8 173A, just that part.

9 THE COURT: Admitted.

10 BY MR. BLADUELL:

11 Q And, Dr. Biro, what are your duties as the director of  
12 the division of adolescent medicine?

13 A I administrate the division, and also serve as a senior  
14 faculty member for the institution. I perform clinical  
15 duties, both inpatient and outpatient.

16 I teach residents, medical students and fellows.  
17 And I conduct research.

18 Q Would you tell us about the overall reputation of the  
19 Department of Pediatrics at the University -- at the  
20 Cincinnati Children's Hospital?

21 A Cincinnati Children's Hospital has been ranked number  
22 three in the country in the residency program. It's also  
23 ranked number three in the country.

24 Q Okay. And what would you consider your areas of  
25 expertise?

1 A My areas of expertise are, of course, in adolescent  
2 medicine, but within the field of adolescent medicine  
3 specifically puberty and sexually transmitted infections.

4 Q Okay. And can you describe what puberty is, pubertal  
5 maturation?

6 A Pubertal maturation is a series of events that include  
7 the development of secondary sexual characteristics, that is  
8 breast development, and pubic hair development, but it's also  
9 the maturation of the brain, it's the changes in body  
10 composition. Going through the pubertal growth spurt and  
11 maturation of various organs in the body.

12 THE COURT: And that's what you call puberty itself?

13 THE WITNESS: Puberty itself, most people say that  
14 the onset of puberty is the development of secondary sexual  
15 characteristics. But before that there are changes in the  
16 brain that bring about these changes.

17 THE COURT: You call that prepuberty? What do you  
18 call it?

19 THE WITNESS: I think that I would go with puberty  
20 being once there's the manifestations of secondary sexual  
21 characteristics. So breast development or public hair  
22 development.

23 THE COURT: All right. Go ahead.

24 BY MR. BLADUELL:

25 Q And what is the relationship, you know, pubertal

1 maturation and chronologic age?

2 A There's a range in chronologic ages of the different  
3 pubertal events. The onset of puberty in boys and girls are  
4 defined, but the different stages within pubertal maturation  
5 there's also standard textbooks that provide ages for those  
6 ranges.

7 Q Okay. As part of pubertal maturation do you use  
8 something called a Tanner Scale?

9 A It had been called for decades the Tanner Scale. We now  
10 call them sexual maturity ratings, but, yes. And those are  
11 stages in the development of the sexual characteristics,  
12 secondary sexual characteristics.

13 For example, breast stage one and pubic hair stage  
14 one are prepubertal. Breast stage five, public hair stage  
15 five are late pubertal, at the adult range.

16 Q And over the years has the Tanner Scale been revised?

17 A I and several other groups of investigators have  
18 recommended various modifications. And so that one of the  
19 papers that I had published suggested that before the  
20 appearance of pubic hair in boys there is an increase in  
21 testicular volume, and that's now relegated as the initial  
22 onset of pubertal maturation.

23 Q As part of your duties at the Division of Adolescent  
24 Medicine, do you see patients?

25 A Yes, I do.

1 Q And can you describe briefly what interactions you have  
2 with patients?

3 A I see patients, both inpatient setting, that is, those  
4 who have been admitted to the hospital, and I also see  
5 patients in the outpatient setting. Typically in a unit we  
6 call the Teen Health Center.

7 I provide primary care in the Teen Health Center.  
8 Most of the visits would be around annual physicals or sports  
9 physicals, or issues around reproductive health, such as  
10 sexually transmitted infections or contraception.

11 Q Okay. And what are the age ranges in general of your  
12 patients?

13 A Although most of my patients are within the ages of 12 to  
14 20 or 21, I've seen patients as young as nine or ten, and I've  
15 gone up to around age 25 or a little bit older.

16 Q Have you done research in the area of pubertal  
17 maturation?

18 A Yes.

19 Q Can you briefly describe the research that you have done  
20 in this area?

21 A So among other activities of research, I've followed  
22 three large longitudinal data sets. One in boys and two in  
23 girls, where we recruited these, at the time, children,  
24 followed them either every six months or every 12 months. In  
25 one of the studies for three or three and a half years. In



1 the second study for ten plus years. And in the current  
2 study, that's ongoing, eight plus years. And it's ongoing, so  
3 there's -- we continue to see them beyond eight years.

4 Q Okay. Now have you been able to, in some of these  
5 studies, draw any conclusions?

6 A So in the boys' study, one was that we had this extra  
7 pubertal stage, if you would, that had not been described.  
8 And we also in that study noted that there was uncertainty  
9 around genital staging in boys.

10 In fact, we discontinued doing genital staging  
11 because it was so unreliable. In the -- both of the girls'  
12 study, in the first girls' study we reported that  
13 approximately one-half of the girls, 47 percent, I believe,  
14 had regression in their pubertal status reported during the  
15 course of the study.

16 And in this most recent one --

17 THE COURT: I don't understand what this means.

18 THE WITNESS: I'm sorry.

19 BY MR. BLADUELL:

20 Q Doctor, can you please describe what --

21 THE COURT: Is he talking about something relating  
22 to his background or what he does, or some opinion he has in  
23 the case?

24 MR. BLADUELL: This all goes to the qualifications.  
25 His research in the area of pubertal maturation.

1 THE COURT: Okay. Well he's using -- it's not clear  
2 to me what he's talking about.

3 MR. BLADUELL: Okay.

4 BY MR. BLADUELL:

5 Q So, Dr. Biro, you've said that you've conducted some  
6 studies in the area of pubertal maturation.

7 A Yes, sir.

8 Q And that area of pubertal maturation is to assess the  
9 stage -- in that research, you assess the stage that different  
10 individuals, that your patients are, correct?

11 A Yes.

12 Q And you were saying that some individuals undergo  
13 regression in stage -- in pubertal maturation?

14 A Yes. In other words --

15 Q Can you describe what the regression of pubertal stage  
16 is?

17 A Yes. So that in the most recent study, one out of five  
18 girls appear to have pubertal breast development, but when  
19 seen six to 12 months later, appeared not to have breast  
20 tissue whatsoever. And in the second large study, when we  
21 compared the information from the girls that we assessed  
22 through looking at their apparent breast stage, that half of  
23 the girls in that study comparing an earlier visit to a later  
24 visit, appeared to go backwards in what their breast stage  
25 was.

1 Q And does that regression affect the apparent ages of  
2 these individuals?

3 A Yes. It would.

4 Q And how would they affect them?

5 A Because you have -- we have standards defined around the  
6 different individual stages. And so if somebody regresses  
7 from, let's say stage three breast development, to stage two  
8 breast development, you'd say that, well, that individual  
9 appeared to be -- you know, have appropriate breast maturation  
10 from -- for somebody who's 11 or 12 years old, and now they  
11 have the appropriate breast maturation for somebody who's ten  
12 to eleven years old.

13 Q So it would make them -- it would make them look younger?

14 A It would make them appear younger, yes.

15 Q Now besides the maturation stages, are there other  
16 factors that are used to determining someone's -- assess  
17 someone's age?

18 A Yes.

19 Q Can you describe your experience studying those factors?

20 A So that, for example, we have standards for how tall  
21 somebody should be at a given age. And so you can look at  
22 somebody's height and then take it back to this table and see  
23 where the average age would be for that particular height.

24 There are changes that occur -- well, of course, in  
25 the bone age, although we do assess that, you can't see that

1 from a physical examination. There are changes that occur in  
2 the body fat percentage. For example, in young women, in  
3 girls, it increases as one goes through pubertal maturation,  
4 and the body fat distribution also changes.

5 So that as a girl goes through puberty, her hips  
6 widen, and fat is preferentially deposited in her buttocks and  
7 in her thighs. And, again, we've published on those data as  
8 well.

9 Q Have you received any awards for your work in pubertal  
10 maturation?

11 A Yes. I've received several national awards. I received  
12 an award looking at a concept called, Pathways Through  
13 Puberty, that girls who have breast development before pubic  
14 hair development, might have a profile that would increase  
15 their subsequent risk of breast cancer.

16 And in the second one, it was looking at our most  
17 recent culprit, and that their maturing at a younger age and  
18 their hormonal profile associated with that onset of earlier  
19 puberty.

20 Q Are you a member of professional organizations?

21 A Yes. Several.

22 Q Can you give us some of them?

23 A I'm a member of the Society for Adolescent Health and  
24 Medicine. North American Society for Pediatric and Adolescent  
25 Gynecology. The American Pediatric Societies -- Pediatric

1 Academic Societies, I'm sorry.

2 And American College of Physicians, as well, of  
3 course.

4 Q Have you published peer review journals -- articles in  
5 journals?

6 A Yes, I have.

7 Q And approximately how many of them?

8 A I've published over a hundred original articles that have  
9 been peer reviewed. And probably 50 or 60 review articles  
10 that have been peer reviewed, as well as chapters for  
11 textbooks and monographs.

12 Q And do these articles describe pubertal maturation?

13 A Um --

14 Q And do you comment on -- I'm sorry. Let me strike that.  
15 Do these articles comment on pubertal maturation assessment?

16 A About 40 to 50 of the original articles are around  
17 puberty. And around 50 or so articles are around adolescents  
18 and sexually transmitted infections.

19 Q Have you served as an expert witness before?

20 A Yes, I have.

21 Q And can you describe the instances where you've served as  
22 an expert witness?

23 A In 1996, Connections v. Screeno (phonetic), and in 1988  
24 or '89 I was asked by the local district attorney's office on  
25 a rape case involving an adolescent.

Biro - Direct (Bla)

14

1 Q And where was -- can you describe the Connections case  
2 was about in 1996?

3 A I was asked to review the images that were published in a  
4 series of adult oriented magazines.

5 Q And overall what was your -- what opinions did you give  
6 in that case?

7 A I commented that there were, one, that assessing age by  
8 the changes associated with puberty is difficult, and there's  
9 a degree of uncertainty. And that these were a few images  
10 that I thought were depicting people under the age of 21.

11 Q Okay.

12 MR. BLADUELL: Your Honor, at this time, the  
13 Government tenders Dr. Francis Biro as an expert in the fields  
14 of pediatrics, adolescent medicine and pubertal maturation.

15 THE COURT: Okay. Any questions on qualifications?

16 MR. MURRAY: No, Your Honor. Not at this time.

17 THE COURT: All right. I'll allow him to testify as  
18 an expert in those fields.

19 DIRECT EXAMINATION

20 BY MR. BLADUELL:

21 Q Dr. Biro, you've already described the changes that occur  
22 during puberty. Now my question is, do these changes vary  
23 from individual to individual?

24 A Yes. The --

25 Q And can you describe what this variation entails?

1 A Yes. The onset of puberty, the age of onset of puberty,  
2 we call the relative timing of puberty maturation. Some  
3 mature early, some mature late.

4 There is also a concept called temporal, which  
5 reflects the rate of change one goes through puberty. And  
6 this temporal can be defined by the onset of secondary sexual  
7 characteristics, to a particular pubertal markers such as the  
8 age of menarche or first menstrual period.

9 And that for young ladies typically that's called  
10 the temporal period, going from breast stage two until the age  
11 of menarche.

12 Q And overall when is the age when girls achieve full  
13 pubertal maturation?

14 A According to the more classic literature that has been  
15 published in the past 20 years, that girls complete full  
16 pubertal maturation 14 to maybe 16 years of age. We published  
17 a paper two years ago that noted that the onset of puberty,  
18 though, appears to be about a year earlier that had been  
19 defined previously.

20 And we are still following those girls to see  
21 whether those later milestones are achieved according to what  
22 the classic times were, or whether they're occurring at  
23 younger ages.

24 Q And when you say that they're at full pubertal maturation  
25 is appearing in younger ages in girls, what do you mean by

1 that?

2 A The onset of breast development is occurring about 11 to  
3 12 months younger than it had been in papers published 20  
4 years ago.

5 Q And are you aware of studies suggesting that the full  
6 pubertal maturation can appear before age -- mid to mid-teen  
7 years?

8 A I'm sorry, could you repeat the question?

9 Q Are you aware of research establishing that full pubertal  
10 maturation, or that maturation could occur in girls at a  
11 younger age?

12 A Yes. Our paper suggests that breast development is  
13 occurring earlier. It actually corresponds with a paper that  
14 was produced in Copenhagen by the Copenhagen Puberty Study,  
15 which also noted a decrease in one year of age.

16 Q Okay. And what about full pubertal maturation in boys?

17 A The literature in boys is a -- it appears that boys are  
18 maturing a little bit earlier. The papers that have been  
19 published have not been completely consistent in how much that  
20 age of pubertal maturation has advanced.

21 Q Now what are in -- can you describe the relationship  
22 between pubertal maturation and chronologic age?

23 A So most time -- we give age ranges of the onset of  
24 puberty, as well as age ranges for these various milestones.  
25 So there's a correlation, it's a rough correlation, but there



1 is a correlation between these various milestones.

2 Q So in your opinion, pubertal maturation can be used as  
3 one factor in determining the age of individuals?

4 A It can be used as one factor, but the determination of  
5 somebody's chronologic age from pubertal maturation is, at  
6 best, an inexact science.

7 Q Okay. And what other factors besides pubertal maturation  
8 stage can experts use in trying to determine someone's age by  
9 visual inspection?

10 A So that with pubertal maturation, there's also several  
11 other changes that do occur, including height, and adult  
12 stature. Including body composition with -- in young men,  
13 typically an increase in lean body mass. In young women,  
14 typically a greater increase mass in fat mass than lean body  
15 mass.

16 In body fat distribution, so that in young men and  
17 adult men more body fat around the waist. In young women and  
18 adult women, more body fat in the buttocks and the thighs,  
19 until women get to be of a more adult age, in which there  
20 starts to be an increase in the central body fat.

21 Q Now in your view, is it difficult for a maturation expert  
22 such as yourself to determine someone's age by visual  
23 inspection?

24 THE COURT: By what? By face --

25 MR. BLADUELL: By visual --

1 THE COURT: Visual inspection.

2 THE WITNESS: I think that it is difficult to do,  
3 yes.

4 BY MR. BLADUELL:

5 Q And can you describe why it is your opinion that this is  
6 difficult?

7 A It's difficult because one has to try to take into  
8 context all of these changes. That, for example, when we see  
9 somebody who is relatively short, our mind automatically  
10 refers back to what would be an appropriate age for that  
11 height.

12 And, again, in medicine we have height tables for  
13 different ages. That it's difficult because of when you're  
14 looking at things such as skin elasticity, sort of the lack of  
15 wrinkles or folds in the skin that if somebody is out in the  
16 sun excessively, or has photosensitive skin, that there's  
17 going to be increased number of wrinkles.

18 There's a lot of different factors that sort of play  
19 into this.

20 Q And in your view, what is the degree of uncertainty among  
21 maturation experts with respect to determining someone's age  
22 by visual inspection?

23 A It depends in part on the age of the individual. And  
24 those who are in their teen years, there's going to be some  
25 uncertainty, one to three, maybe a little bit more in those

1 who are young adults, it probably expands to two to five  
2 years.

3 Q And do you expect that average people without training  
4 and experience in maturation assessment would have difficulty  
5 in determining someone's age by visual inspection?

6 MR. MURRAY: Objection, Your Honor. I don't think  
7 he's been qualified to be an expert on the question of other  
8 people's ability to ascertain apparent --

9 THE COURT: Well, how familiar are you with the  
10 views of, say, your peers in this profession?

11 THE WITNESS: So I'm probably relegated as one of  
12 the national experts in puberty. And the assessment of  
13 puberty. And my peers who also are involved in these  
14 projects, there's been at least two national meetings where  
15 they deferred to my methods of assessment to their own.

16 So they, among a group of pubertal maturation  
17 experts, they consider me to have greater expertise.

18 THE COURT: Well are you familiar with other  
19 writings and other studies in the field?

20 THE WITNESS: Yes, I am, Your Honor.

21 THE COURT: I'll overrule the objection.

22 BY MR. BLADUELL:

23 Q Dr. Biro, so the question was, in your opinion would you  
24 expect someone, the average person, without training and  
25 experience in maturation assessment, to have difficulty in

1 determining someone's age by visual inspection?

2 A I would. And the reason I respond that way is because  
3 it's not just being involved in these three projects, but all  
4 sorts of other projects with having, you know, developed the  
5 protocols for maturation assessment in my projects as well as  
6 other investigator's projects, conducting several thousand  
7 examinations directly, that I have a degree of difficulty.

8 I have also had the opportunity in seeing the  
9 participants in these projects over the course of, you know,  
10 studies lasting from three and a half to ten or more years, to  
11 be able to look at all these changes as they occur in real  
12 time with all these individuals.

13 And seeing them frequently there's -- some young  
14 ladies in some of the projects I've seen 14 or 15 times, for  
15 example. And so that I can see sort of all these changes that  
16 are occurring at the same time, and I would think that that  
17 would be difficult to do with somebody who has less exposure  
18 then that.

19 And I believe that Dr. Tanner himself probably did  
20 not perform as many examinations as I have. And certainly  
21 hasn't published regarding as many observations as I have.

22 Q And when you're referring to Dr. Tanner, is that the  
23 person that developed the Tanner Scales that you talked about  
24 before?

25 A Yes. A colleague of mine, who I've interacted with

1 multiple times before his death.

2 Q Okay. Now you've talked a little bit about the patients  
3 that you see and the difficulties that you have in determining  
4 their age. Have you seen in your practice children that look  
5 older than they are?

6 A Yes.

7 Q And can you give us briefly a description of the patients  
8 that you've seen that look older than they are?

9 A So I can think of several individuals, and one that's  
10 rather striking is a young lady who matured earlier than her  
11 peers. And by the age of 12 was fully physically mature.

12 In addition to that, she dressed rather  
13 provocatively, and like a young adult, and I think that, you  
14 know, now at the age of 14, I would think that most people  
15 would think of her in her late teens or perhaps even a little  
16 bit beyond that.

17 Q So in your experience with patients, would you say that  
18 it's unusual for 15 or 16 years old to look over 18?

19 A I think that they could adopt makeup, or hairstyles, or  
20 styles of dress that would make them appear a little bit older  
21 than they actually were.

22 Q Okay. And, I mean, in your experience, would someone  
23 that is 25 years old, could that person also look under 18?

24 A I think that in the same way -- and we've seen this in  
25 movies, in which people depict much younger people, especially

1 if the movie is taking somebody through various ages in their  
2 life where they appear to be teenagers, yet they might be in  
3 their twenties or so. But I've also seen people who dress in  
4 the styles that you would expect a teenager to dress, and  
5 might use hairstyles or clothing, and, again, makeup to make  
6 themselves appear younger than they actually are.

7 Q Okay. Now is there a relationship between pubertal  
8 maturation and brain development of teenagers?

9 A So there had been a couple of papers that have commented,  
10 actually, on the increasing disparity between the onset of  
11 pubertal maturation and brain development.

12 So there's a part of the brain that develops in the  
13 late school aged child, eight, nine, ten years old, the locus  
14 ceruleus (phonetic) and the strata -- blocking on the name of  
15 it. I'm sorry. It's another part of the hypothalamus. And  
16 this is effectively the reward center of the brain.

17 And that the prefrontal cortex, which is the last  
18 part of the brain to mature, matures in young women between  
19 the ages of 18 and 20, in young men between the ages of 20 and  
20 23.

21 And this prefrontal cortex is the executive part of  
22 the brain. It modulates the amount of emotion that we put  
23 into our thoughts and into our communication. It also acts as  
24 sort of that superego, the don't do this, because there are  
25 some consequences of it. And, of course, the other thing that

1 happens to the adolescent brain is that the brain begins to be  
2 more future oriented. So that one is aware that the current  
3 day behavior might have some impact on subsequent development.

4 But in the early maturing, especially the early  
5 maturing girl, there's a disparity between what physically she  
6 looks like, and what her brain is capable of -- of dealing  
7 with.

8 Q So what is the significance of this disparity between the  
9 timing of pubertal maturation and the timing of brain  
10 maturation?

11 A Well, for example, your reward center says do it, and  
12 your executive center doesn't function yet. The other thing  
13 is that, for example, in the early maturing girl, we know from  
14 several different studies and, including studies that we've  
15 published, that the earlier maturing girl is maturing before  
16 both boys and girls, because boys mature a little bit later,  
17 and the early maturing girl is at a special risk for some of  
18 these behaviors.

19 Such as earlier initiation of sexual intercourse.  
20 Earlier age of acquisition of sexually transmitted infections.  
21 Greater likelihood of being a pregnant teenager. Greater  
22 involvement in tobacco and substance use. Lower academic  
23 achievement. I could go on.

24 Q And is that because the brain is not fully mature at that  
25 age?

1 A Well part of it we believe is that with -- especially  
2 with girls this off timing, is that their peer group is  
3 interacting with them as they appear, what they look like to  
4 them. And so if you're 12 or 13 and you appear to be 16,  
5 you're -- people are going to interact with you like you're  
6 16, not that you're 12 or 13. But your brain cannot really  
7 process, just because you appear to be older, doesn't mean  
8 that your brain -- the parts of the brain mature earlier and  
9 they don't.

10 Q And are you aware of research showing the tendency to  
11 engage in risky behaviors because of this disparity?

12 A Right. Yes. And several people have published in this  
13 area, including myself. We've published several articles  
14 looking at risk and acquisition of sexually transmitted  
15 infections in girls. Especially -- and so the early maturing  
16 girl, again, is at greater risk.

17 Q Okay. Dr. Biro, in connection with this case, were you  
18 asked to review some sexually explicit images?

19 A Yes, I was.

20 Q Okay. And can you -- and how many -- approximately how  
21 many images were you asked to review?

22 A Approximately 150.

23 Q And what's your understanding of where those images came  
24 from?

25 A They -- the images came from you. And you said that they



1 were images from the plaintiffs. You did not say that this  
2 was an exclusive collection that you had. You just said that  
3 this was some of the images.

4 Q Okay. And what is your overall assessment of how old the  
5 people appearing in the images looked?

6 A Of the images that you provided to me, it appeared that  
7 about half were in their twenties or younger.

8 Q Okay. And were you asked to do something more specific  
9 with these images?

10 A I was asked to catagorize them into various groups. And  
11 one group was a group of images representing young women who  
12 could be younger than 18. Another group was -- the second  
13 group was a group that, not that they were, by the way, not  
14 that they were, but that they could be under 18.

15 The second group was a group of young ladies, which  
16 I did not think were under 18, but might be confused by others  
17 as being under the age of 18.

18 And then a third group in which I felt that there  
19 weren't enough visual cues to be able to establish the age of  
20 the person in question.

21 Q And were there also men in those images?

22 A Yes.

23 Q Okay. Now let's -- let me show you Exhibit Number 316,  
24 Dr. Brio. Dr. Biro, do you recognize Exhibit Number 316?

25 A Yes, I do.

1 Q And can you describe what Exhibit 316 is?

2 A So in Section 1, it's those who could be confused as  
3 minors, although they could be over the age of 18.

4 Q So are these the images that you were talking about when  
5 you were asked to classify?

6 A I apologize. Yes. These are the images.

7 Q Okay. And in number one that we see on our screen, the  
8 images that you put in the category of could be confused by  
9 minors, although they may be over 18, correct?

10 A Yes.

11 Q And is that an accurate reflection of those images?

12 A Yes.

13 Q And if we go to the second page. This is another  
14 category of images?

15 A Yes.

16 Q And can you describe what this category means?

17 A This is -- this represents a group of images that I  
18 evaluated, where although I did not believe any of the models  
19 were under 18, that they might be confused by others as being  
20 under 18.

21 Q And why could they be confused by others and not you as  
22 being under 18?

23 A Well because I was looking at a number of different  
24 factors, which included, for example, the relative proportions  
25 of the hip to the waist. So this waist-hip ratio. I was

1 looking at the body fat distribution. I was looking at, if  
2 they were bent or folded, whether there were -- how their skin  
3 reacted to those lines of stress. And I was looking at the  
4 amount of subcutaneous fat tissue. I was looking at the  
5 maturation of the face. As the face goes, through puberty,  
6 there are also changes.

7 The face actually gets larger relative to the head.  
8 The head actually doesn't increase in size after about age  
9 nine or ten, but the face continues to grow, and there's  
10 certain parts of the face, specifically the forehead, the  
11 nose, and the chin that continues to get a little bit larger  
12 as you get into your adult years.

13 Q And you expect the average person without your training  
14 and experience to be able to reliably assess those factors in  
15 determining someone's age?

16 A I believe that it would be more difficult for somebody  
17 else to be able to do that.

18 Q And let's move on to the third page of this Exhibit 316.  
19 Is that -- could you describe what this category means?

20 A This category was a group of models that I wasn't given  
21 -- I didn't feel that I had enough visual cues in order to  
22 provide a reliable estimate of how old they were.

23 Q Okay. Now I'm going to show you some of this --  
24 pictures, so that we can get a sense of how you conducted your  
25 assessment.

1           In Exhibit Number -- if we go back to the first  
2       category, those that could reasonably be confused for minors.

3           And we go to exhibit Number 165G. Dr. Biro, do you  
4       recognize this image?

5       A     Yes. I recognize this image.

6       Q     And is this one of the images that you reviewed?

7       A     Yes.

8       Q     And can you tell us what your opinion about the apparent  
9       age of this person is?

10      A     I thought that this was one of the depictions that could  
11      be confused as being under the age of 18. Oh, this person  
12      could be over 18, that she could be confused as under 18.

13      Q     And why do you say that?

14      A     Okay. So if you take a look at her breasts, you can see  
15      with the shadowing that she has a separate elevation of the  
16      central part of the breast. The scientific terms for those  
17      are aureola and papilla. So this is the classic example of  
18      Tanner's stage breast four.

19            It is also true that some woman never advance to  
20      breast stage five. But still, this image is of breast stage  
21      four. She's shaved her pubic hair, except for a narrow strip  
22      in the middle, so that it makes it difficult to say that she's  
23      anything beyond pubic hair stage three.

24            She has a relatively tubular body shape, that is,  
25      that there's not much in the way of hips relative to the

1 waist. And, again, that would be more consistent with a  
2 teenager then with an -- somebody 18 years or older. And it  
3 may be genetic, but her chin is rather small. And, again,  
4 that -- and that's one of the things that makes it confusing,  
5 because that could be genetic in part, but again that chin is  
6 smaller then one would expect with an adult.

7 There's relatively little subcutaneous fat in this  
8 young lady.

9 Q And when you say that, where are you looking?

10 A I'm looking at the arms, I'm looking, you know, the upper  
11 arms, the forearms, I'm looking at the hands. And also  
12 there's little fat distribution that's in the thighs as well.

13 Q And, I'm sorry, you commented on the pubic hair?

14 A Yes, I did.

15 Q Okay. What was your --

16 THE COURT: Can I just ask a question? You used the  
17 term teenager. Is that a term of art in your field?

18 THE WITNESS: So teenager in our field refers,  
19 specifically to the chronologic age. So it's going to be  
20 teenagers, probably the common definition of what you would  
21 call a teenager, 13 to 19 years of age.

22 We when we refer to adolescent, adolescent can  
23 either refer to the overall group of teenagers, or it could  
24 involve the social behaviors of a group of teenagers.

25 THE COURT: Well is there an agree -- in your

1 profession, is there agreed upon range that applies to the  
2 term adolescent, or not?

3 THE WITNESS: No, there's not.

4 THE COURT: Okay. But a teenager could be anyone  
5 between 13 and 19, that is the years that includes the word --  
6 the letters teen, T-E-E-N?

7 THE WITNESS: Yes.

8 THE COURT: Okay. All right. Go ahead. I'm sorry.

9 BY MR. BLADUELL:

10 Q And, Dr. Biro, based on all your training and experience,  
11 will you be confident -- 100 percent confident that this  
12 person is over the age of 18?

13 A I'm not confident that she's over 18, nor am I confident  
14 that she's under 18, I think that she could be confused with  
15 somebody under the age of 18.

16 MR. BLADUELL: Okay. Now let's move on to Exhibit  
17 Number 164E, please.

18 BY MR. BLADUELL:

19 Q Dr. Biro, do you recognize this image?

20 A Yes, I do.

21 Q And what do -- what was your assessment of the apparent  
22 age of the person depicted in this picture?

23 A Again, I thought this was a young lady who could be  
24 confused as minor, although she could be over the age of 18.

25 Q And can you briefly explain why you say that?

1 A Okay. So she has relatively modest breast development.  
2 That could be because she's thin, but it could also be because  
3 she's younger.

4 She has pubic hair four development. It could be  
5 because she's shaved, or it could be because that is her pubic  
6 hair maturation.

7 She has -- you can see sort of along her left side  
8 her ribs are well-defined. There's very little subcutaneous  
9 fat. Again, it could be somebody who's relatively thin. In  
10 the -- one of the striking things you can see that, although  
11 it could be genetic, she has a relatively underdeveloped chin.

12 Lastly, although in this young lady her hips are a  
13 little bit wider than in the previous young lady, she still  
14 doesn't have probably the proportion of hips relative to waist  
15 that you would expect with an adult.

16 Q And can you be confident that this person is, just by  
17 looking at the person, over 18?

18 A I can't be confident that she's over 18, nor could I be  
19 confident that she's under 18.

20 Q Okay.

21 MR. BLADUELL: Now let's go to Exhibit Number 168.  
22 And that's -- 168, page 80. Okay.

23 BY MR. BLADUELL:

24 Q Dr. Biro, did you review images in the book that I'm  
25 holding in my hand, Photo Sex?

1 A You provided me several PDF images from that book.

2 Q Okay. And I'm going to --

3 MR. BLADUELL: Permission to approach the Bench,  
4 Your Honor.

5 THE COURT: Yes.

6 BY MR. BLADUELL:

7 Q Dr. Biro, I'm going to show you page 80 of the book Photo  
8 Sex by David Steinberg. There is a depiction in there. Yes?

9 A Yes. I reviewed this pic -- this photograph.

10 Q And can you -- what was your opinion about the apparent  
11 age of the individuals depicted in this?

12 A Well it's an adult male that's in the background. But in  
13 the foreground is a young lady. We can't tell that she has  
14 any public hair at all. I mean, she could have shaved her  
15 pubic hair, or she might not have had any pubic hair.

16 There's little subcutaneous fat. And from what we  
17 can sort of see of her waist and her hips, that she has narrow  
18 hips relative to her waist. Again, one of the -- there's been  
19 people publish that some racial and ethnic groups might be  
20 more difficult to be able to assess than other groups.

21 And Asian women are in that group that might be --  
22 leading to some of this difficulty. But I thought that she  
23 could reasonably be confused as a minor. I can't say that she  
24 is under 18, or that she is over 18.

25 MR. BLADUELL: And that's Exhibit 168G, for the



1 record.

2 THE COURT: 168D, for dog?

3 MR. BLADUELL: G, G. 168G.

4 THE COURT: G? Thank you.

5 MR. BLADUELL: And let's go to 167C -- I'm sorry  
6 167F.

7 BY MR. BLADUELL:

8 Q Dr. Biro, do you recognize this image?

9 A Yes, I do recognize this image.

10 MR. BLADUELL: And if we go to -- can we go to 125U.

11 BY MR. BLADUELL:

12 Q Dr. Biro, is Exhibit 125U the same image as 167F?

13 A If that was the image that you just showed me, yes.

14 Q Yes. And you also commented on this image and assessed  
15 it for the ages of those appearing in the box cover, correct?

16 A Yes.

17 Q And did you also review this particular URL?

18 A Yes, I did.

19 Q And what was your assessment of the ages of the  
20 individuals appearing in this cover?

21 A So as we discussed just a few minutes ago, that one looks  
22 at somebody's height, and that one automatically relegates  
23 that to a chronologic age. And as I said, in medicine, we  
24 know that when somebody comes in, we put the percentile  
25 height, and if it's lower then we would expect it, we then

1 look at as the -- what the age is for somebody who's the 50  
2 percentile for that height.

3 And, typically, I mean, these young ladies are  
4 chosen -- selected because they're both short, and they also  
5 have low body mass.

6 Q And how do you know that?

7 A It describes it as such. And I had --

8 Q And where, in this -- in the URL?

9 A It's in the URL. Yes.

10 Q And what -- how does it describe them?

11 A For example -- for example, the genre is younger women.  
12 And it says "All under five foot one inches and 100 pounds."  
13 So these are young ladies who were likely selected because of  
14 those attributes.

15 MR. BLADUELL: Let's go to Exhibit Number 161D  
16 please.

17 BY MR. BLADUELL:

18 Q Dr. Biro, do you recognize this image?

19 A I recognize this image.

20 Q And in what category do you put this image?

21 A I put this in the second category, I believe it was  
22 paragraph 19 in my report.

23 Q Okay.

24 A And this would be those that could potentially be  
25 confused by minors. Although I do not believe that they're

1 under the age of 18. In Eve, for example, somebody might be  
2 drawn to that she has small breasts, and might assume because  
3 of that that she is somewhat younger than she actually is.

4 But one can see that her hips are much wider  
5 relative to her waist. And that this is likely somebody who  
6 is over the age of 18, but could be confused by somebody who  
7 just looks at this and does A more cursory examination, or  
8 doesn't take into account some of these other factors.

9 Q Okay.

10 MR. BLADUELL: And if we could go to 164J.

11 BY MR. BLADUELL:

12 Q Do you recognize this image, Dr. Biro?

13 A I do.

14 Q Okay. and what category do you put this person?

15 A I thought that this, again, could be a young lady who  
16 might be confused as an adolescent. I did not feel that she  
17 was under the age of 18.

18 Q And what are the things that you can see that you would  
19 think that average people would not see?

20 A Okay.

21 Q In determining their age.

22 A So, again, her breast development is breast stage five,  
23 so it's fully mature. So, you know, it's -- she has somewhat  
24 more modest breasts than some of the other models. It's  
25 completely consistent with adult maturation. Again, she

1 shaves, so that she's -- one could misinterpret that as pubic  
2 hair three, or four.

3 She's got -- again, you can take a look, her hips  
4 are greater than her waist, much greater than her waist. And  
5 she's got enough subcutaneous fat that -- around the  
6 umbilicus, that you can sort of see that she's developing both  
7 subcutaneous fat, and a little bit more central adipose.

8 MR. BLADUELL: Now lets go to Exhibit Number 160,  
9 please.

10 BY MR. BLADUELL:

11 Q Dr. Biro, is this another image that you were asked to  
12 review?

13 A Yes.

14 Q And what category did you put this image in?

15 A So we're talking about the person who's sort of facing  
16 towards us. And I felt that there was probably -- I didn't  
17 feel that I had enough visual cues in order to make an  
18 accurate assessment of this person's age.

19 Q And why didn't you have cues?

20 A Part of it is because she's behind the performer, or the  
21 model, or the person in the foreground of the photograph. And  
22 so it takes away a lot of the cues that I sort of examine,  
23 that I look at in trying to assess the age.

24 Q What would you need to look at?

25 A I mean, I -- if she could be standing up, that would be

1 helpful, without anybody obstructing views that you could take  
2 a look at, again, take a look at what the hip ratio is  
3 relative to the waist. Take a look at the breast maturation,  
4 take a look at the pubic hair maturation.

5 Get a better look at her overall face. It -- take a  
6 look at whether there's wrinkles, or lines of force along the  
7 skin. And you can't -- we have a hard time seeing any of  
8 those in this.

9 Q Can you be confident that this person is over 18?

10 A I have no confidence in -- I can't be confident this  
11 person is under 18, or over 18. I can't make a determination.

12 MR. BLADUELL: Let's go to 162D, please

13 BY MR. BLADUELL:

14 Q Dr. Biro, do you recognize those images?

15 A I recognize these images.

16 Q And what category do you place those images in?

17 A I felt that there weren't enough visual cues to really  
18 assign any age to these people.

19 Q And why was that?

20 A It's -- you're not seeing the rest of the body, you're  
21 just seeing the vulva and immediate media files in these  
22 people, and that's all.

23 Q Is it your opinion that you cannot determine a person's  
24 age just by looking at this isolated part of the body?

25 A I would say that the middle one is probably over the age

1 of 18, because of hardware that she's had inserted, to people  
2 who consent for that procedure. But that's the only thing I  
3 could say.

4 Q Okay.

5 MR. BLADUELL: Let's go to 164N, please.

6 BY MR. BLADUELL:

7 Q Do you recognize this image?

8 A I do.

9 Q And what category do you put this image in?

10 A I, again, said that if -- it was -- I felt that I was not  
11 able to determine the ages of these models. In part because  
12 there's distortion of the images, because it's, I'm assuming a  
13 fisheye lens that was used for this photograph. So there's a  
14 distortion of a lot of the body parts.

15 Q And let's go to --

16 THE COURT: Can I interrupt for one second. Are you  
17 at all familiar with digital photography?

18 THE WITNESS: Your Honor, I know the term, I know  
19 some of the things that are capable. I have not sort of --

20 THE COURT: All right. Have you ever come across  
21 examples where there's a photo that has been taken and then  
22 the photo has been touched up, or manipulated in some way?  
23 For example, that someone who is younger, they can be made to  
24 look older, and vice versa by use of digital -- the ability of  
25 a digital photograph to be altered by someone after the image

1 is taken?

2 Only if you know. Don't speculate.

3 THE WITNESS: I -- I don't know. But if I could be  
4 allowed just a moment's speculation, would be that I --

5 THE COURT: Well you can't speculate.

6 THE WITNESS: Okay. I'm sorry.

7 THE COURT: All right. Go ahead. Next question.

8 MR. BLADUELL: Let's go 162G.

9 BY MR. BLADUELL:

10 Q Is this another image that you were asked to evaluate,  
11 Dr. Biro?

12 A Yes.

13 Q And can you describe this image for the record?

14 A It's a young man who's holding his penis and having some  
15 device against that penis. You see his medial portion of his  
16 thighs, you can see his hands, you can see his penis. You  
17 really can't see much else.

18 Q You're not confident that this person is over 18?

19 A I would have no way of being able to give you the age of  
20 this person.

21 Q All right.

22 MR. BLADUELL: And, finally, let's go to Exhibit  
23 Number 168E.

24 BY MR. BLADUELL:

25 Q Do you recognize this image, Dr. Biro?

1 A I do recognize this image.

2 Q And what category did you place this image in?

3 A Although I am fairly certain about the young lady in the  
4 foreground, the young man I think would be difficult to be  
5 able to give an exact age on him. I base this on the fact  
6 that he doesn't have well-defined musculature, which is  
7 something that one has in the late teens and early twenties.

8 That he is completely clean shaven, but he does have  
9 sideburns there. I -- he doesn't have much in the way -- he  
10 has good skin elasticity, and I'm gray green color blind, so I  
11 interpret it that he had red hair, and that he is very fair  
12 skinned.

13 And that -- so I would have expected more wrinkles  
14 in somebody who is older, but I felt uncertain being able to  
15 label him as being under 18, or over 18. I'm unable to make  
16 that determination. There's certain cues that tell me that he  
17 should be under 18. There's certain cues that I have that  
18 tell me that he should be over 18. I am at a loss.

19 Q Okay. Now, Dr. Biro, you're aware that of the law at  
20 issue in this case, correct?

21 A Yes, sir.

22 Q And you're aware that Section 2257 requires producers of  
23 sexually explicit material to check the ID's of their  
24 performers, correct?

25 A Yes, sir, I am.



1 Q Regardless of their age?

2 A Yes.

3 Q Do you think this is an effective system to allow for the  
4 determination of the person's age?

5 MR. MURRAY: Objection, Your Honor. He's not an  
6 expert on policy or law.

7 THE COURT: Yes. I'll sustain the objection. You  
8 can rephrase the question in terms of his expertise.

9 BY MR. MURRAY:

10 Q Well based on your expertise, and your testimony about  
11 the difficulties of assessing age by visual inspection, would  
12 you -- you would think that requiring ID's for the performers  
13 in sexually explicit depictions is a good way to deal with the  
14 uncertainty, in determining someone's age by visual  
15 inspection?

16 A I think that it's possible for somebody who's 17 years of  
17 age to be able to apply effective makeup and hairstyle to make  
18 themselves appear in their mid-twenties, if they so choose.

19 And I believe that the opposite can also be an  
20 effect, that somebody could dress themselves, or use makeup or  
21 hairstyles to make themselves appear younger. So even though  
22 I said that, you know, there's a degree of uncertainty around  
23 establishing age by looking at all these cues, that somebody  
24 who's making themselves appear younger or older will expand  
25 that degree of uncertainty.

1 Q And based on your experience and your training, in your  
2 view would a law that sets -- what's your view on the efficacy  
3 of a rule that requires producers of sexually explicit  
4 material to check ID's for individuals who, for example, look  
5 under 18 -- or under 25?

6 A So I am a pediatrician and --

7 MR. MURRAY: Objection, Your Honor. Again, the --

8 THE COURT: Sustained. I don't know what you mean  
9 by efficacy. I mean, does he think it's important to find out  
10 the age of someone who is -- from a medical point of view, do  
11 you think it's important to check the age of someone who is  
12 appearing in sexually explicit images?

13 THE WITNESS: Your Honor, again, because I am a  
14 pediatrician, I -- even if there's only one case or two cases  
15 in a hundred, and somebody who could be mistaken who was in  
16 there 17 and trying to appear older, as a pediatrician it's  
17 part of what we strive for is to protect the health and the  
18 rights of minority age people, of children.

19 BY MR. BLADUELL:

20 Q And would a law -- would a law that requires the  
21 producers of sexually explicit material only to check ID's of  
22 people who look at a certain age, 25 or under, would that be  
23 effective in protecting minors?

24 MR. MURRAY: Objection, Your Honor.

25 THE COURT: Well, sustained. I think that's beyond

1 his expertise. What the effect of -- it depends how it's  
2 enforced. I mean, I don't think that's a medical -- you can  
3 ask him from a medical point of view other questions if you  
4 want.

5 But I think they ought to be phrased so he's  
6 answering as a pediatrician, and not just as a citizen or --  
7 BY MR. BLADUELL:

8 Q Okay. Well from a medical point of view, if the law were  
9 that producers only had to check ID's of individuals who look  
10 under 18, would that be a difficult assessment to make for  
11 people without experience in maturation assessment?

12 MR. MURRAY: Objection.

13 THE COURT: That, I'll let him answer. But this is  
14 from your viewpoint as a pediatrician.

15 THE WITNESS: With my years of experience and all  
16 the studies that I've conducted, I have a degree of  
17 difficulty. The medical literature suggests that it is  
18 extremely difficult, especially if one only uses isolated  
19 parts of the human anatomy, such as breast development. And  
20 that, if it's difficult for me to be able to -- to find  
21 performers between the ages of 18 to 25, I would say that the  
22 difficulty would have to be greater in other people.

23 MR. BLADUELL: Your Honor, I move Exhibits 1 -- 316,  
24 and all of the exhibits that appear in that summary into  
25 evidence.

1 THE COURT: Okay.

2 MR. BLADUELL: And I have no further questions at  
3 this time.

4 THE COURT: All right. Admitted. All right.  
5 Cross-examine.

6 CROSS-EXAMINATION

7 BY MR. MURRAY:

8 Q Dr. Biro, you've been at the U of C for almost all of  
9 your professional career, is that correct?

10 A Yes, sir.

11 Q Okay. Have you ever been in private practice?

12 A No, sir.

13 Q Now you spend how much of your time, let's say in the  
14 last five years, actually seeing patients? What percentage of  
15 your time is devoted to actually seeing patients?

16 A This past year, I've spent over 40 percent of my time  
17 seeing patients. In the past five years it's varied, probably  
18 25 percent to 45 percent.

19 Q Okay. And you see patients on both an outpatient basis  
20 -- actually primarily on an outpatient basis, isn't that true?

21 A Yes. Although this year I spent quite a bit of time on  
22 an inpatient basis, as well.

23 Q Because every once in a while you're required to do a  
24 rotation in the hospital?

25 A Yes.

1 Q Okay. But that's not something that you do regularly, is  
2 it?

3 A Those expectations are regular, yes.

4 Q Well how many times a year, for example?

5 A This year and last year were a little bit different than  
6 most other years, but typically I've been on inpatient for a  
7 full month, or two, two-week blocks. And that's probably been  
8 pretty consistent over the -- that's been the minimum over the  
9 past five years.

10 Q Okay. So 11 months out of the year the patients that you  
11 see are on an outpatient basis?

12 A I do inpatient and outpatient, at the same time. When I  
13 do an inpatient, my work week goes up to 75, 80 hours a week.  
14 It's not a 40-hour work week.

15 Q Eleven months of the year you're doing only outpatient?

16 A Yes.

17 Q Okay. And the vast majority of your patients are  
18 adolescents, isn't that true?

19 A Yes.

20 Q And in fact, of the patients that you've seen who are  
21 over the age of 21, at least in the past couple of years, only  
22 about five to seven percent of the people that you've seen as  
23 a medical doctor were over the age of 21, isn't that true?

24 A Yes, that is true.

25 Q And 75 to 80 percent of your patients are 19 years old

1 and younger, correct?

2 A Yes. I'd have to look at the exact -- yes, I believe  
3 that to be roughly --

4 Q Now you would agree that pubertal maturation is not an  
5 exact science ,is it?

6 A No, it is not.

7 Q And in fact, medical science doesn't study puberty and  
8 pubertal maturation as a way of figuring out how old a person  
9 is, isn't that true?

10 A That is true.

11 Q Now on your direct examination you estimated the ages of  
12 some of the persons depicted in images produced by some of the  
13 plaintiffs in this case, correct?

14 A Yes, correct.

15 Q And you did so as well when you wrote your report, didn't  
16 you?

17 A Yes.

18 Q And you used, among other things, changes associated with  
19 pubertal maturation to make these estimates, did you not?

20 A They were -- yes, those were incorporated in those  
21 decisions.

22 Q And those, in turn, were based upon, among other things,  
23 the Tanner Maturation Scale, correct?

24 A Yes, that is true.

25 Q And in fact your Attachment B to your report gives a

1 chart which pretty much duplicates the Tanner Maturation  
2 Scale, does it not? With maybe some minor revisions that you  
3 added to it?

4 A Yes.

5 Q And in fact, in connection with your review of males  
6 depicted in these photos that you considered, you used Tanner  
7 Pubic Hair Staging system for estimating -- helping you to  
8 estimate the ages of the males, correct?

9 A Yes.

10 Q And for females you used Tanner's Pubic Hair Staging  
11 system as well as one factor in helping you to estimate the  
12 ages, correct?

13 A Yes. One of several factors.

14 Q And then for female breast staging system you used a  
15 modification of Tanner's system, isn't that true?

16 A Yes.

17 Q And I think you indicated that Dr. Tanner -- well who was  
18 Dr. Tanner?

19 A Dr. Tanner --

20 Q Just so the record is clear. Go ahead.

21 A Dr. Tanner was a physician living in Boston -- London,  
22 I'm sorry. Living in London, who studied a group of young men  
23 and young women. The studies that were utilized to provide  
24 the standards for pubertal assessment were living in an  
25 orphanage outside of London.

1           And he took photographs of these people, and then  
2       lined up the photographs and designated what stage they were  
3       on the basis of the photographs.

4       Q     And then he came up with what you pediatricians, or  
5       people in the field of pubertal maturation call the Tanner  
6       Scale?

7       A     He borrowed the system actually from Reynolds and Vines  
8       who had published it back in the forties. But he utilized  
9       some of their scales. And then they became known in this  
10      country as the Tanner Stages.

11      Q     Okay. Now you are familiar with the journal known as  
12      Pediatrics, are you not?

13      A     Yes, I am.

14      Q     And in fact that is a peer reviewed journal, is it not?

15      A     Yes, it is.

16      Q     As a matter of fact, it is the hallmark journal of the  
17      American Academy of Pediatrics, isn't it?

18      A     Yes.

19      Q     And in fact you have published several articles yourself  
20      in that journal, isn't that true?

21      A     Yes.

22      Q     I want to show you what has been marked -- what was  
23      marked in your deposition exhibit as Plaintiff's Exhibit 013  
24      and what I've now marked as Plaintiff's Exhibit 137. And you  
25      see that that is a copy of a letter that was published in that



1 peer review journal known as Pediatrics, in December of 1998,  
2 correct?

3 A Yes.

4 Q And that was a letter from two physicians, including Dr.  
5 Tanner himself, correct?

6 A Yes.

7 Q And in that letter, it was -- the title of it was,  
8 "Misuse of Tanner Puberty Stages to estimate chronological  
9 age." Correct?

10 A Yes, it is.

11 Q And the letter goes on to recite that one of them had  
12 been involved as an expert in several U.S. Federal cases  
13 involving child pornography, correct?

14 A Yes.

15 Q And then go on to say:

16 "In these cases the staging of sexual maturation,  
17 the Tanner Stage, has been used not to stage maturation, but  
18 to estimate probably chronological age. This is a wholly  
19 illegitimate use of Tanner Staging. No equations exist  
20 estimating age from stage, and even if they did, the degree of  
21 unreliability in the staging, the independent variable, would  
22 introduce large areas into the estimation of age. The  
23 dependent variable. Furthermore, the unreliability of the  
24 stage rating is increased to an unknown degree by improperly  
25 performed staging. That is not at a clinical examination, but

1 through non-standardized, and thus unsuitable photographs.

2 "Therefore, we wish to caution pediatricians and  
3 other physicians to refrain from providing expert testimony as  
4 to chronological age based on Tanner Staging, which was  
5 designed for estimating development or physiologic age for  
6 medical, educational and sports purposes. In other words,  
7 identifying early and late maturer's. The method is  
8 appropriate for this, provided chronologic age is know.

9 "It is not designed for estimating chronologic age  
10 and, therefore, not properly used for this purpose."

11 Is that correct?

12 A Yes, sir.

13 Q And that's what Dr. Tanner wrote, correct?

14 A Yes, it is.

15 Q Now one of the things you mentioned that -- before I  
16 forget it, you were talking about how the brain matures in  
17 human beings later than -- than puberty, correct?

18 A What I said was that there were parts of the brain,  
19 actually puberty --

20 Q Yes.

21 A -- puberty only comes about because of maturation of the  
22 LH-RH pulse generator, which is part of the hypothalamus, and  
23 that's what the onset of puberty is. But, yes, the prefrontal  
24 cortex matures after pubertal maturation begins, or probably  
25 even after it ends.

1 Q Right. And that actually happens even after the age of  
2 18, correct?

3 A Yes.

4 Q And that's the part of the brain that helps us control  
5 our impulses, and helps us conform our conduct to the law,  
6 correct, for example?

7 A I would assume that the latter part of your statement is  
8 correct. Certainly the first part of your statement is  
9 correct.

10 Q Okay. And you're familiar -- are you familiar with the  
11 fact that that's the one of the very reasons that the United  
12 States Supreme Court declared that the death penalty could not  
13 be imposed on persons under the age of 18, because of the late  
14 development of their -- the brain -- the part of the brain  
15 that controls their impulses?

16 MR. BLADUELL: Objection, Your Honor.

17 THE COURT: Overruled. Did you understand the  
18 question?

19 THE WITNESS: I was not aware that that's why the  
20 death penalty was not, but it makes perfectly good sense to  
21 me.

22 BY MR. MURRAY:

23 Q Okay. Anyway, that was just an aside. Let me get back  
24 to your testimony, and your report in particular. In your  
25 report, and I'll show it to you if you need to see it. But in

1 your report at paragraph 11, on page 3, if you happen to have  
2 your report in front of you.

3 A I do. Thank you.

4 Q You state as follows.

5 "Pubertal maturation typically impacts the apparent  
6 ages of teenagers. Those in their mid to late teens who have  
7 achieved full pubertal maturation can easily appear to be in  
8 their twenties."

9 Correct?

10 A Yes, sir.

11 Q Okay. And by mid to late teens, you're referring ages 15  
12 or 16 to ages 19, correct?

13 A Yes, sir.

14 Q And I think you indic -- you really meant to say can  
15 easily appear to be in their early twenties? Wasn't that what  
16 you indicated that you should have written?

17 A Certainly the statement can easily appear to be in their  
18 early twenties would be accurate.

19 Q Okay. Now then in paragraph 15 of your report, on page  
20 four, you write:

21 "In my view, there is a degree of uncertainty about  
22 the visual determination of a person's age, plus or minus two  
23 to five years. That is, despite relevant training, experts in  
24 maturation assessment may be off with specific maturation  
25 stage, and this could lead to a degree of uncertainty of one

1 to three years for assessment of age in teens and young  
2 adults. And two to five years in assessment of somewhat older  
3 adults."

4 Correct?

5 A Yes, sir.

6 Q Okay. So when it comes to teens and young adults, the  
7 margin of error is around one to three years, correct?

8 A Yes.

9 Q And when it comes to older adults, the margin of error is  
10 two to five years, correct?

11 A Yes.

12 Q So if I understand correctly what you're saying is, if  
13 we're talking about teenagers and young adults, that would  
14 mean that if someone is actually 19 years old, you might  
15 confuse that person as anywhere from 16 to 22 years old,  
16 giving a one to three year margin for error?

17 A If they're not trying to make -- make themselves appear  
18 younger or older. Yes.

19 Q Okay. But that's what you mean by that margin of error,  
20 one to three years, correct?

21 A The one to three years is without trying to make  
22 themselves appear differently, yes.

23 Q Just by looking at them, in other words? In their  
24 natural state.

25 A Yes, sir.

1 Q Okay. And then when it comes to older adults, you're  
2 saying the margin of error is two to five years. So, for  
3 example, if we have somebody who's 50 years old, someone might  
4 estimate their age anywhere between 45 and 55, if you use the  
5 maximum five-year margin for error, correct?

6 A Right. I guess I wasn't thinking about some people --  
7 when I wrote this, I wasn't thinking about 50 and 60 year  
8 olds, I was thinking more about 30 and 40 year olds.

9 Q Okay. But the same thing would apply to a 50 year olds  
10 as 40 year olds, wouldn't it, the same margin of error?

11 A I think when you get up to, let's say, age 60, I think  
12 that there would be even a little bit more degree of  
13 variability, simply because --

14 Q Sure. ,

15 A -- there's a bigger of percentage.

16 Q Sure. I mean you could take a 60-year-old who's trim and  
17 fit and has taken good care of himself, or herself and you  
18 might say, I think that -- I think she's 50 years old, rather  
19 than 60?

20 A Yes. At that age, yes.

21 Q Okay. But you're not going to confuse her for somebody  
22 who's under the age of 18?

23 A No, you're not.

24 Q Okay. Now let's talk bout the area of confusion. You  
25 would agree, would you not, that generally speaking children

1 who are 12 years of age and younger are not going to be  
2 confused as adults. Isn't that true, who are at least 18 or  
3 over?

4 A Generally, I believe that to be true, yes.

5 Q Okay. And you would agree that even most 13 year olds,  
6 not all, but most 13 year old children are not going to be  
7 confused as adults who are age 18 or over, as a general rule,  
8 correct?

9 A As a general rule, yes.

10 Q And I think you would even agree that most 14 year old  
11 children as a general rule will not be confused as adults,  
12 although some could be, correct?

13 A Correct. As you get older, as you start increasing the  
14 age the -- the likelihood -- you know, if you think of it sort  
15 of as a distribution, like a bell-shaped curve, that curve  
16 begins to -- as the age goes up, that curve begins to  
17 encompass 21 with greater likelihood.

18 Q Well let's be precise. Do you agree with the statement  
19 that most 14 year olds will not be confused as adults?

20 A Most 14 year olds -- most 14 year olds would not be  
21 confused.

22 Q Okay. Now let's go to the other end of the spectrum.  
23 Would you agree that as a general matter, adults who are 25  
24 years old and above, are not, generally speaking, going to be  
25 confused as minors aged 17 or below?

1 A So I would agree that is generally true. But not always  
2 true.

3 Q Okay. So, generally speaking, the age range where there  
4 could be confusion as to whether a person under 18 is an  
5 adult, and whether a person over age 18 is actually a minor,  
6 the general age range of confusion would be ages 15 to 24,  
7 generally speaking?

8 A Generally speaking, that is true, if you're looking at  
9 generalities.

10 Q And, in fact, if you were to go up to the age of 30 on  
11 the -- on that end of the spectrum, that would capture nearly  
12 everyone who could conceivably be confused as being under the  
13 age of 18, wouldn't it?

14 A That would encompass many more than just 24 or 25, yes.  
15 And most, the vast majority.

16 Q Okay. Now let's talk a little bit about the -- and just  
17 looking around the courtroom, you can see -- how many people  
18 in this courtroom do you see, as you just look out here, that  
19 you think would be -- might be confused as someone under the  
20 age of 18?

21 A Well there's one person in the courtroom that I'd have to  
22 look at more closely.

23 Q I was hoping you would say that. Could you point her  
24 out?

25 A It's the young lady in the second row.



1 Q Good. That happens to be my law partner's young  
2 daughter. So she'll be happy to know that. But, otherwise,  
3 everyone else in the courtroom would not be confused as  
4 someone under the age of 18, would you agree with that?

5 A On casual inspection, no. But there's at least one or  
6 two people who might possibly be confused.

7 Q Okay. So one or two people out of about, I don't know,  
8 20 or so people in the courtroom, just approximately?

9 A Yes, sir.

10 Q And apart from those one or two people, you don't need to  
11 be -- you wouldn't need to be an expert to make that same  
12 assessment, would you?

13 A I don't believe so.

14 Q Okay. Now let's talk about -- you gave testimony on  
15 direct examination about the -- the Connection case. And that  
16 was also a case involving 2257, correct?

17 A Yes, sir.

18 Q And you testified in that case in Federal Court in  
19 Cleveland in 1996, correct?

20 A Yes, sir.

21 Q Okay. And in that case, you studied what were known as  
22 swingers magazines?

23 A Yes, sir.

24 Q Okay. And those swinger's magazines included sexually  
25 explicit images throughout the pages of those magazines of

1 various people, correct?

2 A Yes, sir.

3 Q And you studied a total of eight of those magazines,  
4 correct?

5 A Yes, sir.

6 Q Okay. By the way, when you wrote your report in that  
7 case, though, you were under a very serious misunderstanding  
8 about the age of majority, weren't you?

9 A Yes, sir.

10 Q You were under the impression that the age of majority is  
11 21, at the time you wrote your report, correct?

12 A Yes.

13 Q And you later learned that it's actually 18 and younger  
14 -- or 18 is the age of majority, correct?

15 A I've learned a lot in the past 17 years.

16 Q Okay. As we all have. Thank you, Doctor. The -- so you  
17 studied those eight magazines with the purpose in mind of  
18 doing what you did in the courtroom today, ascertaining  
19 whether any of the persons depicted in those magazines,  
20 estimating what their ages were, correct?

21 A Yes, sir.

22 Q Okay. And in that case, if I'm not mistaken, you came to  
23 the conclusion that there were maybe a few images where you  
24 were unsure -- where the person depicted might be under the  
25 age of 21. Do you recall that?

1 A Yes, I do.

2 Q Okay. But you also came to the conclusion that the vast  
3 majority of the photos that were depicted in those eight  
4 sexually explicit magazines depicted persons who were  
5 obviously over 21 years of age. Isn't that true?

6 A Yes, sir.

7 Q And in fact, many of the photographs that you reviewed in  
8 that case obviously depicted persons in their thirties,  
9 forties, and even fifties, isn't that true?

10 A I haven't seen those in the 16 years or 17 years since  
11 the case. And I have to confess, I recall that most of them  
12 were adults, and some of them were middle-aged adults. Many  
13 of them from memory.

14 Q Yes.

15 A Were middle-aged adults. But it's been years since I've  
16 seen those images.

17 Q And I appreciate that. Let me help refresh your  
18 recollection, Doctor, by showing you the transcript of the  
19 proceeding that occurred on April 8th, 1996 in the Connection  
20 case at which you testified.

21 And in your testimony, in Federal Court in  
22 Cleveland, I believe -- and isn't it true that you were asked  
23 these questions, and gave these answers?

24 "Q So isn't it true, sir, that the vast majority  
25 of the photographs that you reviewed in all of these magazines

1 depicts people who are obviously over 21 years of age?"

2 And your answer was:

3 "A That is true."

4 "Q And in fact many of the photographs that you  
5 reviewed obviously depict people in their thirties, and  
6 forties, and even fifties, correct?"

7 And your answer was:

8 "A That is correct."

9 "Q And as to the vast majority of photographs  
10 depicting people who are obviously over 21, you don't need a  
11 photo identification to come to that conclusion that they are  
12 over 21, do you?

13 A I do not. No."

14 "Q And you wouldn't expect that anyone else would  
15 need a photo identification to come to that conclusion as to  
16 the vast majority of the people depicted in these magazines,  
17 correct?"

18 And your answer was:

19 "A I agree."

20 Is that your testimony in Federal Court in  
21 Cleveland?

22 MR. BLADUELL: Objection, Your Honor. No -- in no  
23 way inconsistent with what Dr. Biro testified.

24 THE COURT: The question is, did you give that  
25 testimony?

1 THE WITNESS: I did provide that testimony, yes.

2 BY MR. MURRAY:

3 Q All right. Now you've testified in direct examination,  
4 and I think you included in your report the fact that you  
5 reviewed approximately 150 individuals who appeared in  
6 plaintiffs' images provided by the Government, correct?

7 A Correct.

8 Q And that roughly 50 percent of the images are relatively  
9 young individuals who appear to be in their late teens or  
10 early twenties, correct?

11 A Yes, sir.

12 Q Okay. So you would agree that roughly 50 percent of the  
13 images were not of relatively young individuals who appear to  
14 be in their late teen or early twenties?

15 A Yes, sir.

16 Q Okay. And I think you indicated you don't know how the  
17 Government selected those images, correct?

18 A Correct.

19 Q And you don't know whether it was an exhaustive list, or  
20 just a partial list of the plaintiffs' images, correct?

21 A Correct.

22 Q Okay. And so you don't know whether as to any particular  
23 plaintiff what you had a opportunity to review is or is not a  
24 representative sample of that plaintiff's body of work,  
25 correct

1 A Correct.

2 Q And so you have no information as to what percentage of  
3 that particul -- of a particular plaintiff's entire body of  
4 work is of adults who could not be confused as minors, for  
5 example?

6 A Correct.

7 Q Okay. Now, and you're not an expert on the subject of  
8 sexually explicit materials generally, are you?

9 A No, I am not.

10 Q Okay. Or the quantity of such materials that are  
11 commercially produced, correct?

12 A No, I'm not.

13 Q Okay. So you have no information to give us as to the  
14 percentage -- what percentage of the universe of sexually  
15 explicit images of adults are of persons youthful looking  
16 enough to be confused as minors?

17 A No, I don't.

18 Q Okay.

19 MR. MURRAY: That's all I have. Thank you, Your  
20 Honor.

21 THE COURT: Any redirect?

22 MR. BLADUELL: Yes, Your Honor.

23 REDIRECT EXAMINATION

24 BY MR. BLADUELL:

25 Q Dr. Biro, you were asked in cross-examination about an

1 article or a letter that Dr. Tanner wrote to some journal,  
2 correct?

3 A Yes, sir.

4 Q And in that letter Dr. Tanner said -- criticized the use  
5 of maturation stages to determine chronologic age?

6 A Yes, sir.

7 Q Okay. Now do you know how Dr. Tanner develops the stages  
8 of maturation stage?

9 A Yes.

10 Q And can you explain to us, how did he develop his stages?

11 A Yes. He took photographs of the young ladies on, I  
12 believe an annual basis, but I don't know the exact interval.  
13 They were living within the orphanage, and then after  
14 collecting several years worth of photographs, lined up the  
15 photographs and then categorized what maturation stage they  
16 were in.

17 Q And approximately how many subjects did Dr. Tanner use to  
18 develop the stages?

19 A I believe it was around 120. I mean, it's -- one could  
20 look it up.

21 Q One can look it up. Now in your years of experience  
22 conducting maturation assessments and examining patients,  
23 would you say that you have reviewed more -- that you have  
24 examined more patients than Dr. Tanner did for developing  
25 those Tanner Stages?

1 A Yes, sir.

2 Q And approximately how many more?

3 A Between the three major studies and the two ancillary  
4 studies that I've been involved with, it's well over 5,000  
5 examinations.

6 Q And in each -- and these examinations you were -- you  
7 knew the person's age, correct?

8 A In the vast majority of the time, yes.

9 Q And you were able to compare that person's age to their  
10 -- your clinical evaluation of their maturation stage,  
11 correct?

12 A Yes, sir.

13 Q Now just to be clear for the record. In your examination  
14 of plaintiffs' images, did you only use the Tanner Stages of  
15 maturation assessment?

16 A No, sir.

17 Q And what other factors did you use besides the Tanner  
18 Maturation Stages?

19 A I used several of the things which I knew changed with  
20 pubertal maturation, and I've published in peer review  
21 journals these changes. These changes include, waist height  
22 ratio, waist to hip ratio, about body composition, about body  
23 fat distribution. And one that I've not published on, but  
24 looking at these skin folds and skin elasticity and how that  
25 changes as one gets older.



1 Q Now have you had conversations with Dr. Tanner about  
2 refinements to the Tanner Maturation Stages?

3 A Yes, sir.

4 Q And what have you -- what have those conversations been  
5 about?

6 MR. MURRAY: Objection, Your Honor, that would be  
7 hearsay. Just conversations.

8 THE COURT: You say the question is how do they come  
9 about?

10 MR. BLADUELL: Why were they -- what did you tell  
11 Dr. Tanner about the stages?

12 THE COURT: I'll overrule the objection. Sir, you  
13 can testify to what you said to Dr. Tanner, but you can't  
14 testify to what he said back to you.

15 THE WITNESS: Dr. Tanner and I actually exchanged  
16 letters to each other. And I described to him the -- for  
17 example, in the boy's study, I described to him that there was  
18 a six-month period before the appearance of pubic hair that  
19 demonstrated that the young man was in pubertal maturation.

20 And I asked him his thoughts about the validity of  
21 that finding, and would he go forward and -- would he, if he  
22 had that data, go forward and publish it.

23 BY MR. BLADUELL:

24 Q And have your suggestions about refinement to the Tanner  
25 Stage been adopted?

1 A Yes.

2 Q And how so?

3 A For example, the textbooks prior to publishing that  
4 article talked about either genital staging, or pubic hair  
5 staging in boys as the initial manifestation of puberty, but  
6 after publication of that article, most textbooks say in fact  
7 it is now generally accepted that there is a period of time in  
8 which there's an increase in testicular volume before the  
9 appearance of pubic hair.

10 Q Now you were also asked, Dr. Biro, about paragraph 15 of  
11 your report. Which was exhibit 173. About the degree of  
12 uncertainty in determining someone's age one to three years  
13 for younger adolescents, and two to five years for somewhat  
14 older adolescents, correct?

15 A Yes, sir.

16 Q Now is that degree of uncertainty, one to three years,  
17 for younger adolescents, and two to five years for older  
18 adolescents, the degree of uncertainty among maturation  
19 experts?

20 A I would believe so. I've not conducted a study asking my  
21 colleagues what they feel the degree of uncertainty is.

22 Q But you have known of studies that make note of this  
23 discrepancy among maturation experts in determining this stage  
24 of maturation, correct?

25 A Yes, sir.

1 Q Now would you expect the degree of uncertainty to be  
2 larger for average people, than maturation experts?

3 A I would expect that to be true. I don't know that to be  
4 true. But I would expect that to be true.

5 Q Okay. You also were asked as to whether people over the  
6 age of 25 would not be confused for minors, correct?

7 A Yes, sir.

8 Q Do you remember that?

9 A Yes, sir.

10 Q And you said that that would not be always true?

11 A Yes, sir.

12 Q And can you explain why you said that that would not be  
13 always true?

14 A I think that, you know, if somebody was not trying to  
15 appear younger or older, there would be a given degree of  
16 uncertainty. But I believe that, you know, actors and  
17 actresses often try to appear younger or older. We've seen  
18 this actually in movies in which somebody can rather  
19 convincingly look several years different than what their true  
20 biologic age is. So the degree of uncertainty expands if  
21 somebody wants it to expand, if somebody wishes to appear  
22 young or older than they actually are.

23 Q Okay. Would checking someone's driver's license would be  
24 more reliable to determine whether that person is over a  
25 particular age, then relying on visual inspection?

1 A It would be more valid, certainly, yes.

2 Q And you were also asked about your experience in sexually  
3 -- reviewing sexually explicit depictions, correct?

4 A Yes, sir.

5 Q Now you mentioned that as part -- in your -- as a  
6 profession at the University of Cincinnati, you conduct -- you  
7 taught some courses, correct?

8 A Yes, sir.

9 Q And was that -- one of those courses in human sexuality?

10 A Yes, sir.

11 Q And can you describe how -- what happened in these  
12 courses of -- in human sexuality?

13 A So I was co-director of the course, I provided some  
14 lectures for the medical students. I also conducted small  
15 group sessions for a group of 10 or 12 students. I did that  
16 for several years.

17 And that course discussed sexual health throughout  
18 the life span, as well as normal and atypical sexual  
19 behaviors.

20 Q And did you review sexual explicit material as part of  
21 that course work?

22 A Our first session, actually, was showing pornographic  
23 video for an hour and a half to the medical students, to try  
24 to desensitize them, so that they would feel more comfortable  
25 with discussing these images, yes.

1 Q Now you were also asked about looking at people in this  
2 room could be confused about their ages, correct?

3 A Yes, sir.

4 Q Now comparing the individuals in this room to the images  
5 that you saw for this report, would you say that the  
6 individuals that you saw in your report are on average younger  
7 than the individuals in this room?

8 A Yes, I believe that to be true.

9 MR. BLADUELL: No further questions, Your Honor.

10 THE COURT: Any recross?

11 RECROSS-EXAMINATION

12 BY MR. MURRAY:

13 Q Doctor, on redirect you were asked whether or not you  
14 would expect the margin of error for estimating ages to be  
15 greater in the case of persons other than experts like you in  
16 the field. Do you recall that?

17 A Yes, sir.

18 Q Okay. You, however, have no way of knowing, and do not  
19 have any information, for example, about how experienced adult  
20 film producers are in gauging the ages of people who come to  
21 them seeking to appear in their films, correct?

22 A I have no idea.

23 Q Okay. So you don't know whether that would be true of  
24 them based on their experience with all the actors and  
25 actresses who appear in their films, do you?

1 A No, I do not.

2 Q And you don't know whether it would be true of  
3 photographers who have experience in being attuned to the age  
4 ranges of their subjects, do you?

5 A No, I do not.

6 Q Okay.

7 MR. MURRAY: That's all I have. Thank you, Your  
8 Honor.

9 THE COURT: Thank you, Doctor. All right. We'll  
10 take a ten-minute recess at this time. Thank you. It will  
11 probably be more like 15 minutes. About how long will the  
12 direct be on the next witness?

13 MR. SWINTON: About a half hour, Your Honor.

14 THE COURT: Okay. All right. Very good.

15 (Recess taken, 10:56 a.m. to 11:19 a.m.)

16 THE COURT: All right. We're ready to proceed with  
17 the next witness.

18 MR. SWINTON: And, Your Honor, defendant calls Dr.  
19 Phillip Stark.

20 THE COURT: Okay. When we're all done this witness,  
21 we'll then have a short luncheon recess, or whatever you want  
22 to do, and then we'll have the oral arguments after that.  
23 Okay?

24 THE CLERK: Raise your right hand.

25 PHILIP BRADFORD STARK, GOVERNMENT WITNESS, AFFIRMED

Stark - Voir Dire (Swi)

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1 THE CLERK: For the record, state and spell your  
2 land name.

3 THE WITNESS: Philip Bradford Stark, S-T-A-R-K.

4 DIRECT EXAMINATION

5 BY MR. SWINTON:

6 Q Good morning, Dr. Stark.

7 A Good morning.

8 Q Can you describe for the Court your educational  
9 background?

10 A I have a bachelor's degree in philosophy from Princeton.  
11 I'm a law school dropout. I have a PhD in geophysics from the  
12 University of California, San Diego.

13 THE COURT: You what? Sorry.

14 THE WITNESS: A PhD in geophysics from --

15 THE COURT: Geophysics?

16 THE WITNESS: Yes.

17 THE COURT: Okay.

18 THE WITNESS: From the University of California, San  
19 Diego. And post doctoral training in statistics at the  
20 University of California, Berkeley.

21 BY MR. SWINTON:

22 Q And what do you currently do?

23 A I'm a professor of statistics and chair for the  
24 Department of Statistics at the University of California,  
25 Berkeley. And I'm also affiliated faculty in designated

1 emphasis and computational science and engineering.

2 Q And when did you begin teaching statistics courses?

3 A 1988.

4 Q And do you currently teach statistics courses?

5 A Yes, I do.

6 Q What courses do you teach?

7 A I teach a variety of courses at all levels from  
8 undergraduate introductory courses for psychology, sociology  
9 business and economic students, to core courses for a major  
10 that are more technical, master's level statistics courses for  
11 both students who are studying for masters in statistics, or  
12 students in other departments, including social sciences and  
13 engineering who need some statistics, and PhD level courses in  
14 statistics, which are typically for bio-statistician's or  
15 statisticians.

16 Q And you mentioned that you're the -- currently the chair  
17 of the Statistics Department at Berkeley?

18 A Yes, I am.

19 Q And when did you become chair?

20 A I've been chair for about a year. I was vice chair for a  
21 year before that.

22 Q And what does the role of chair entail?

23 A It's partly of the running the operation from  
24 establishing the budget, fund raising, deciding what areas we  
25 should be hiring new faculty in, figuring out which courses to



1 teach, what courses to trim.

2 Trying to understand the direction the field is  
3 going in in order to stay at the top. And my personal goal as  
4 chair is to reclaim the number one position from Stanford. We  
5 used to be number one until recently.

6 Q Now are you an accredited professional statistician?

7 A Yes, I am. I have accreditation from the American  
8 Statistical Association.

9 Q And what does it mean to be an accredited professional  
10 statistician?

11 A It's just a badge that I have a level of skill and  
12 experience in ongoing education contributing to the field.

13 Q Do you belong to any other professional organizations?

14 A Yes, I do. I belong to the Institute of Physics. I  
15 belong to the Bernoulli Society, which is an international  
16 statistical association. I belong to the Institute of  
17 Mathematical Statistics.

18 Q And have you written any articles on statistics or  
19 statistical methods?

20 A Yes, I have.

21 Q And approximately how many articles have you written?

22 A I think I have about 125 publications in all, and all but  
23 a very small number, you know, are -- have statistical  
24 content. They're either developing new statistical methods or  
25 applying statistics to some substantive field.

1 Q Were any of these articles in peer reviewed publications?

2 A Yes. I think seventy-four of my publications were peer  
3 reviewed.

4 Q And have you ever published in the fields of social  
5 science or public policy?

6 A Yes.

7 Q And have you ever written any textbook, or textbook  
8 chapters on statistics?

9 A Yes, I've written an undergraduate introductory textbook  
10 on statistics.

11 Q Have you ever served on the editorial board of a peer  
12 review journal?

13 A Yes, I've been on the editorial boards of four journals.

14 Q Have you ever won any rewards for your work?

15 A Yes. I had a National Science Foundation post doctoral  
16 fellowship. I had --I was a presidential young investigator,  
17 a Miller Research Professor, and I've won some awards for my  
18 work on election auditing.

19 The most recent one was from the Chancellor's Award  
20 for Public Service for Research in Public Interest.

21 Q And, Dr. Stark, have you ever served as a consultant in a  
22 lawsuit before?

23 A Yes, I have.

24 Q And approximately how many times have you been such a  
25 consultant?

1 A A couple of dozen.

2 Q Have you ever served as a testifying expert?

3 A Yes, I have.

4 Q And on approximately how many occasions have you done so?

5 A It's on the order of 20. I've -- those weren't all --  
6 they didn't result in testimony. I mean, some cases disappear  
7 before even the report gets written.

8 Some settle after a report is written. I haven't  
9 testified nearly that many times.

10 Q Have you ever served as an expert report for the  
11 Department of Justice?

12 A Yes, I have.

13 Q And on approximately how many number of occasions have  
14 you done so?

15 A I think I've worked on about six or seven cases for the  
16 Department of Justice, that's resulted in testimony. And one  
17 case before this one. I've written reports in a couple of  
18 others.

19 Q Have you ever served as an expert for a party who is  
20 adverse to the Federal Government in litigation?

21 A Yes. Several times. Actually I'm currently involved in  
22 a matter that's adverse to the Federal Government.

23 Q On the number of occasions where you served as an expert  
24 in litigation, have you ever not been qualified as an expert?

25 A No, I've been qualified in the State and Federal Court,

1 and never not been qualified.

2 Q Have you ever testified before any legislative bodies?

3 A Yes, I have. I testified to the U.S. House of  
4 Representatives subcommittee on the census regarding use of  
5 survey sampling to adjust the census for undercount.

6 I've testified to the California Senate Committee on  
7 natural resources regarding sampling to estimate abalone  
8 populations. And I've testified to both the California Senate  
9 and the California Assembly on the use of sampling to check  
10 election integrity, and verify that notes were tabulated  
11 accurately.

12 Q And, Dr. Stark, in the present lawsuit are you being  
13 compensated for your work?

14 A Yes, I am.

15 Q And what is your hourly rate for your work in this case?

16 A \$1,200

17 Q And is that amount commensurate with what you've charged  
18 for serving as an expert witness in other cases?

19 A That's been my rate for all clients since January.

20 MR. SWINTON: Your Honor, at this time, the  
21 defendant hereby tenders Dr. Stark as an expert in the field  
22 of statistics.

23 THE COURT: The field of?

24 MR. SWINTON: Statistics.

25 THE COURT: Okay. All right. Cross-examine on

1 qualifications?

2 MR. MURRAY: No, Your Honor.

3 THE COURT: All right. You may proceed as an  
4 expert.

5 DIRECT EXAMINATION

6 BY MR. SWINTON:

7 Q And, Dr. Stark, in your research have you ever used  
8 statistics to estimate a prevalence rate before?

9 A Yes, I have.

10 Q And when you've estimated a prevalence rate, are there  
11 any key considerations to take into account?

12 A Yes. If you're in a situation where you can't afford to  
13 do a complete census, or a census is impractical, and you need  
14 to base an estimate on a sample, there's three primary  
15 ingredients to consider.

16 One is the sampling frame, one is the method by  
17 which the sample is drawn, and the other is the response rate.  
18 So I can explain those, if you'd like.

19 Q So if we take the first one first, what is a sampling  
20 frame?

21 A The sampling frame is the part of the population or the  
22 group of individuals or units that you are actually able to  
23 draw a sample from. Typically, when you're talking about  
24 people, it's difficult to enumerate everyone in the group that  
25 you'd actually like to study, but you might have a list that's

1 available that overlaps with the population that you'd like to  
2 study largely.

3 It's the list from which you actually draw the  
4 sample, is the sampling frame. Typically a sampling frame  
5 isn't going to be an exact match to the population you care  
6 about, it will be somewhat over inclusive and somewhat under  
7 inclusive.

8 Q And if -- is it possible to extrapolate from the sample  
9 population, if there is such a mismatch?

10 A It introduces bias, the mismatch between the frame and  
11 and the population. The extent of that bias depends on the  
12 extent of the mismatch. To the extent that the thing you care  
13 about agrees between the frame and the population you're  
14 sampling from, bias is less of an issue, but it can disagree  
15 substantially, it could bias your estimate substantially.

16 Q And the second factor you mentioned was the sample  
17 selection, and I think you said random sample. What is a  
18 random sample?

19 A Random sampling is the touchstone for sampling methods.  
20 It's the gold standard, it's the only one that you can  
21 actually make quantitative statements about the  
22 representativeness and reliability of the results from the  
23 sample.

24 Random in this context is a term of art. In  
25 ordinary parlance people talk about random, they use it

1 synonymously with haphazard, like I heard the most random  
2 thing today, or ran into this random person.

3 That's not what random is for the purpose of random  
4 sampling. Random sampling involves deliberate stirring, you  
5 actually have to introduce randomness. So to make an analogy  
6 to understanding -- picking out whether a pot of soup is too  
7 salty, the most efficient way to do it is you stir the soup  
8 and then you taste a tablespoon.

9 So the stirring and then taking a tablespoon amounts  
10 to taking a random sample of the soup. But you have to  
11 deliberately stir it, that's the randomness.

12 Q So when you're studying humans, how do you ensure that  
13 you're selecting a random sample?

14 A Well you can't really stir people up -- well not  
15 literally. So what you typically do is assign an identifier  
16 to everybody in the sampling frame, and you stir up the  
17 identifiers.

18 Now how do you stir the identifiers? You typically  
19 make a list on a computer and use the computer to draw a  
20 random sample from the list. And then those people whose  
21 identifiers are drawn, you go and find them and seek to  
22 interview them.

23 It's quite analogous to stirring and taking a  
24 spoonful.

25 Q Is a random sample something different from a sample of

1 convenience?

2 A Yes. A sample of convenience isn't a random sample, it's  
3 one of the kinds of things that's drawn in distinction to a  
4 random sample. A sample of convenience is typically taking  
5 those members of the population that are easily accessible to  
6 you for whatever reason.

7 It might be because they present themselves to you,  
8 they volunteer. It might be because they're in your  
9 classroom. It might be for some other reason. But that's a  
10 distinction.

11 Q Is it possible to extrapolate to a broader population  
12 from a sample of convenience?

13 A Well you can do it. The problem is that you can't figure  
14 out how wrong you're likely to be. You can't make any sort of  
15 rigorous imprint. So if you assume that the population is  
16 like your sample, there's no way to know how far off your  
17 estimate is likely to be.

18 There's no way to construct a margin of error, or a  
19 confidence interval, or anything like that. There's no way to  
20 quantify the uncertainty.

21 Q And I think the third factor you mentioned in making a  
22 presence estimate is response rate. What's a response rate?

23 A Especially if we're talking about taking a sample of  
24 people, like a sample survey, not everyone who you select in  
25 the random sample will be willing to talk to you, or you might



1 not be able to find them at all.

2 To the extent that people are unwilling to give  
3 data, or you're unable to get data from them, that can  
4 introduce bias into the results. The -- especially if they  
5 tend to differ from the people -- from -- differ with regard  
6 to the characteristic that you care about from the -- you  
7 know, from the people who are willing to respond to the  
8 results.

9 That introduces something called non-response bias.

10 Q And is there an optimal number for a response rate?

11 A Well you'd like to get 100 percent. In a lot of  
12 situations you can get 100 percent. But when you're dealing  
13 with people, it's typically hard to get 100 percent. There  
14 will typically be some non-response.

15 There's no bright line.

16 Q Is there an acceptable threshold for a response rate?

17 A There is. People publish recommendations for this in the  
18 Federal Judicial Center Reference Manual on Scientific  
19 Evidence, the chapter of Survey Sampling says that if the  
20 response rate is above 90 percent, you can generally treat the  
21 results of the survey as reliable. It then goes down a scale  
22 of various percentages like 75 to 90, and 50 to 75, saying you  
23 need more and more skepticism.

24 And below 50 percent, I think it essentially says  
25 that it's not suitable for making quantitative estimates.

1 Q And, Dr. Stark, are you aware of something called the  
2 margin of error?

3 A Yes.

4 Q And what's a margin of error?

5 A Margin of error is a way of quantifying the uncertainty  
6 in your estimate having to do with the luck of the draw.  
7 Because you're drawing the sample at random, the luck of the  
8 draw enters. I mean, if I were trying to estimate the  
9 average, for the sake of argument, age of people in this room,  
10 since we're talking about age, I might take five people at  
11 random, compute their average age, and that would give me an  
12 estimate of the average age of the people in the room.

13 But if I repeated that procedure, I would probably  
14 get a different -- I wouldn't get exactly the same five  
15 people, I'd get a slightly different estimate of the average  
16 age. The margin of error takes that variability from -- in  
17 the sample into account to establish what the uncertainty is  
18 due to the luck of the draw.

19 But it's quantifying the error that's coming from  
20 the fact that I'm basing things on a random sample.

21 Q Are you aware of something called a confidence interval?

22 A Yes.

23 Q And what's a confidence interval?

24 A It's related to the margin of error. It's another way of  
25 quantifying the uncertainty that comes from the luck of the

1 draw. So a confidence interval is a range of numbers that's  
2 constructed in such a way that it has a known large  
3 probability of containing the true value of the thing that  
4 you're trying to estimate.

5 Again, the probability there is coming from the  
6 random -- the randomness of the sample. It has to be a random  
7 sample, or it's not a confidence interval.

8 Q So is it possible to have a margin of error or confidence  
9 interval if there's no random sample?

10 A No, it's possible to go through the motions of computing  
11 the numbers as if the sample were random, but the  
12 interpretation is completely different, because the margin of  
13 error's trying to quantify the luck of the draw from random  
14 sampling. The confidence interval is trying to quantify  
15 probability that comes from the random sampling.

16 Q And, Dr. Stark, have you reviewed the expert report of  
17 Dr. Michelle Drouin in this case?

18 A Yes, I have.

19 Q And have you reviewed the estimate she makes about the  
20 prevalence of sexting among 18 to 24 year olds nationwide?

21 A Yes, I have.

22 Q And do you have an opinion about the statistical basis  
23 for that estimate?

24 A Yes. I don't see a statistical basis for the estimate.

25 Q And what's the basis for your opinion in that regard?

1 A Well the two studies that are her primary evidence were  
2 based on undergraduates enrolled in the psychology class at a  
3 Midwestern university.

4 They were students who volunteered in return for  
5 course credit. It's not -- because that -- that's a sample of  
6 convenience. They were students who were available to her for  
7 the study. They were students who volunteered on some basis.  
8 It's not clear whether they would be representative of other  
9 students in the same class.

10 It's even less clear that they would be  
11 representative for the students at the same university in  
12 different kinds of courses, or students at other universities,  
13 or young adults as a whole for the nation.

14 Q And these problems that you've identified with Dr.  
15 Drouin's studies of undergraduate psychology students, would  
16 those be present in any study using undergraduate psychology  
17 students?

18 If we were talking about something that had to do with  
19 human biology where there's reason to believe that people are  
20 quite similar, for example, if you were doing a study on  
21 reaction time or something -- something like that, then there  
22 might be a biological basis for concluding that students in  
23 other places, or young adults as a whole are similar to the  
24 sample you get as a sample of convenience in an undergraduate  
25 psychology class.

1 But for something involving social behavior, I think  
2 that there is big differences between students in different  
3 majors, even within the same university, and geographic  
4 differences, and I don't see -- there's no -- there's no  
5 biological basis for making that generalization, and there's  
6 no statistical basis for making the generalization, since the  
7 sample isn't a random sample.

8 Q And, Dr. Stark, are you aware that Dr. Drouin compared  
9 the results of the studies of undergraduate psychology  
10 students to three other studies that weren't limited to  
11 undergraduate students?

12 A Yes, sir.

13 Q And are you aware that her estimate about the prevalence  
14 of sexting nationwide, is based on where she determined that  
15 there was a convergence of the evidence from these six  
16 studies?

17 A Yes. I'm aware of that.

18 Q And is a convergence of the evidence a statistical  
19 method?

20 A No. I haven't heard that phrase used as a term of art in  
21 anything to do with science or statistics.

22 Q Can you form a reliable estimate by considering  
23 prevalence estimates from six different studies?

24 A If the studies themselves were reliable, if they were  
25 well-grounded, then combining information from them would make

1 sense, and in principal could give you a more reliable  
2 estimate. But if none of them is grounded, the fact that they  
3 agree doesn't mean very much. I could give you a story as an  
4 analogy.

5 Q Sure.

6 A Suppose we want to know how tall the Emperor of China is,  
7 we've never see him, so we decide to collect a bunch of  
8 evidence. We ask a million Chinese how tall the emperor is.  
9 Everybody gives us a number. For the sake of argument, let's  
10 say that on average they say he's five foot nine, and that  
11 almost everybody gives an answer that's between five foot  
12 eight and five foot ten.

13 So we have convergence of the evidence that the  
14 height is between five eight and five ten. If I'm  
15 interpreting correctly what Dr. Drouin meant. The problem is  
16 that the Emperor lives in the Forbidden City, and nobody's  
17 every seen him.

18 So we have an awful lot of evidence, but none of it  
19 is grounded. The fact that it converges doesn't tell us  
20 anything new.

21 Q And, Dr. Stark, do you recall whether the definition of  
22 sexting was the same across all six studies that Dr. Drouin  
23 considered?

24 A My recollection is that it was not.

25 Q And does the lack of similarity in definition effect the

1 reliability of her estimate?

2 A It certainly complicates the matter of making an estimate  
3 of -- according to any single definition. If you took  
4 sexually suggestive to be an inclusive category that included  
5 sexually explicit, then it might be possible to get an  
6 estimate for sexually suggestive. But if you're mixing  
7 sexually suggestive and sexually explicit together, I don't  
8 see how you can get an estimate for sexually explicit.

9 Q Now, Dr. Stark, I'm going to show you a document that's  
10 been marked as Defendant's Exhibit 203. Have you seen this  
11 document before?

12 A I'm sorry, I'm looking at this?

13 Q Yeah.

14 A I've seen that page before.

15 Q An I believe this is a study that both Dr. Drouin and Dr.  
16 Zimmerman relied on in their -- in making their prevalence  
17 estimates.

18 MR. SWINTON: If we could turn to page five of the  
19 study, which is Bates Number 2035, and cull out the first two  
20 paragraphs under the heading about the survey?

21 BY MR. SWINTON::

22 Q Dr. Stark, these paragraphs say that the survey was  
23 fielded online to a total of 1,280 respondents. It was  
24 conducted by Tru, a global leader in research on teens and  
25 twenty something's.

1 The second paragraph says that:

2 "Respondents for this survey were selected from  
3 among those who have volunteered to participate in True's  
4 online surveys. And that respondents were stratified  
5 according to the U.S. Census, and the data had been weighted  
6 to reflect the demographic compositions of teens and adults."

7 Now, Dr. Stark, based on this information can you  
8 make a determination about whether this survey is a reliable  
9 estimate of the nationwide prevalence of sexting?

10 A Well the -- that disclaimer paragraph says twice that it  
11 isn't a random sample. It says first that it was volunteers,  
12 so that's a sample of convenience.

13 And then it repeats it at the bottom that it's not a  
14 probability sample. A probability sample and random sample  
15 are synonymous. So it's very difficult to know whether this  
16 really is representative. There's no reason that it should  
17 be, since it isn't a random sample. And there's no way to  
18 quantify how far from representative it's likely to be,  
19 because it isn't a random sample.

20 I don't know what the response rate is. I don't  
21 know how the people were solicited to volunteer. I don't know  
22 how many were involved in actually answering this, but I do  
23 know that they weren't a random sample in the first place.

24 Q And, Dr. Stark, have you reviewed the expert report of  
25 Dr. Mark Zimmerman in this case?



1 A Yes, I have.

2 Q And have you reviewed the estimate that he makes about  
3 the prevalence of sexting among 18 to 24 year olds nationwide?

4 A Yes, sir.

5 Q And do you have an opinion about the statistical basis  
6 for his estimate?

7 A Again, I don't think it has a statistical basis.

8 Q And what's the basis for your opinion?

9 A Well the method that he used to select the sample is  
10 called respondent driven sampling.

11 THE COURT: Say that slowly.

12 THE WITNESS: Respondent driven sampling. Or RDS.  
13 And it is a form of a sample of convenience. It's a  
14 complicated method, it's an interesting method. But it's kind  
15 of like fishing. Where you fish for candidates for your  
16 survey with \$20 bills, and then you ask them -- you pay them  
17 to go do more fishing for you by paying them for other people  
18 whom they recruit.

19 This is a little bit like holding out the spoon and  
20 seeing what soup jumps into it. There's not any particular  
21 reason that this should give a representative sample. It's  
22 not -- it's certainly not a random sample.

23 BY MR. SWINTON:

24 Q And, Dr. Stark, are you aware that Dr. Zimmerman obtained  
25 prevalence rates for the use of certain types of drugs from

1 the participants he selected using RDS?

2 A Yes.

3 Q And are you aware that many of the drug use prevalence  
4 rates were very similar to prevalence rates from a highly  
5 regarded national survey on drug use?

6 A Yes.

7 Q And does the similarity in these rates increase the  
8 reliability of the findings from Dr. Zimmerman's sexting  
9 study?

10 A No, I think it cuts the other way. If the estimates  
11 hadn't agreed, that would have been a red flag that his est --  
12 that his other variables were likely to be unrepresentative,  
13 as well. But the fact that it agrees on one measure, doesn't  
14 give you any confidence that it agrees on other measures.

15 There's a very famous examples -- counter examples  
16 to that assumption.

17 Q And what are those counter examples that you mention?

18 A Well one of the ones that gets discussed in statistic  
19 classes a lot is from Shere Hite's study on women and love  
20 from the 1980's, I think. She took a nationwide survey and  
21 had roughly 5,000 respondents, if I recall correctly.

22 Those respondents matched -- the women matched the  
23 national demographics of women quite accurately in terms of  
24 their age distribution, their ethnicity, their income  
25 distribution, where they lived whether it was urban, suburban

1 or rural. So it was a beautiful match to the demography, but  
2 for the quantity that she was actually interested in, which  
3 was people's happiness and satisfaction in their  
4 relationships, it was way off.

5 Because the thing that she was trying to measure was  
6 related to people's propensity to respond to the survey.

7 Q Dr. Stark, are you aware that Dr. Zimmerman weighted and  
8 stratified the data in the sexting study to make it more  
9 similar to the demographic characteristics in the national  
10 population?

11 A Yes.

12 Q And does this weighting and stratification increase the  
13 reliability of Dr. Zimmerman's sexting findings?

14 A It might, it might not. It's sort of impossible to tell.  
15 The fact that the demographics didn't match in the first  
16 place, is an indication that his sample wasn't represent --  
17 the sample itself wasn't representative of the -- of young --  
18 U.S. young adults.

19 Whether the, you know, adjustment of the data after  
20 the fact to try to bring the demographics in line helps or  
21 hurts, is hard to know. But even if the demographics had  
22 agreed, the example of Hite's study on women in love shows  
23 that matching the demographics doesn't give you any kind of  
24 guarantee that you match on the characteristic that you're --  
25 that you care about, the reason that you're doing the study.

1 Q And are you aware that Dr. Zimmerman offered to discount  
2 his estimate by as much as 50 percent to demonstrate that the  
3 number of people sexting nationwide is large, even if his  
4 estimate isn't precise?

5 A Yes.

6 Q And is there a statistical basis for this type of  
7 discounting?

8 A Well if he had started with a random sample, then he  
9 could have done the discounting in order to construct a  
10 confidence interval, so that we could have high confidence  
11 that the true value the true prevalence of sexting is above  
12 that lower number that he gives.

13 But since the sample he started with isn't a random  
14 sample, there's no way to know how much you have to discount  
15 it in order to get a conservative estimate of the rate of  
16 sexting.

17 It might be 50 percent, it might be 90 percent, it  
18 might be 99 percent, there's no way to know.

19 Q And, Dr. Stark, I'm going to show you a document that's  
20 been marked as Plaintiff's Exhibit 37-HHHH. Do you recognize  
21 this document?

22 A I recognize this page, yes.

23 MR. SWINTON: If we could call out the summary  
24 paragraph at the top middle of the page?

25 BY MR. SWINTON:

1 Q So, Dr. Stark, this summary paragraph says that for the  
2 study data were collected through an on-line questionnaire in  
3 Swedish administered through the Swedish web portal  
4 Passager.se. Out of the total sample of 1,828 participants,  
5 almost a third, both men and women, reported to have engaged  
6 in cybersex.

7 Now, Dr. Stark, can you use the findings from this  
8 study to reliably estimate the number of Americans who are  
9 engaging in cybersex?

10 A Only if you assume that Americans as a whole are like  
11 that subset of the Swedish population that uses this web  
12 portal, and assuming that this accurately represents what  
13 happens at that web portal.

14 MR. SWINTON: And if we could go to the second page  
15 of this study. And if we could call out the paragraph in the  
16 left-hand column that starts with the word "Mostly."

17 BY MR. SWINTON:

18 Q Dr. Stark, this paragraph says that:

19 "Mostly cybersex is a real time event involving two  
20 persons who are typing each other messages using a chat client  
21 like ICQ or Microsoft Messenger. In other cases, a couple may  
22 find or create themselves a chat room in cyberspace where this  
23 interaction takes place.

24 "Some even exchange pictures or short movies of  
25 themselves, or erotic pictures and movies found on the web to

1 accompany the otherwise text based communication."

2 Dr. Stark, do you know from this study the amount of  
3 cybersex that involved the exchange of images?

4 A No. This suggests that it's a small fraction of it, but  
5 it doesn't give any quantitative estimate.

6 MR. SWINTON: And if we could go to the third page  
7 of this study and call out the paragraph under the heading  
8 procedures.

9 BY MR. SWINTON:

10 Q And this paragraph says that the questionnaire was  
11 launched through a Swedish portal site called Passager, and  
12 that a banner was placed on the website for approximately two  
13 weeks and appeared randomly on the portal, as well as on its  
14 sub-sites. There was no way to control where the banner would  
15 appear.

16 And it was not possible to predict for whom the  
17 banner would show. Thus, for all practical purposes, its  
18 appearance was truly random according to the Passager  
19 administrators. So, Dr. Stark, is this an example of the  
20 random sample that you were discussing earlier?

21 A Possibly, sort of. It's hard to tell. From the  
22 description, it sounds like they're confusing haphazard with  
23 random. That just because it's unpredictable doesn't mean  
24 that it's equally likely for any given individual -- any  
25 individual page view to include the banner or not.

1 But even if you grant that it was displayed at  
2 random, that's not a guarantee that the people who respond to  
3 the ad correspond to a random sample of those people who used  
4 the portal during that two-week period.

5 It's certainly a very different sampling frame from  
6 the Swedish population or the U.S. population.

7 Q Dr. Stark, I'm going to show you another document, this  
8 one's been marked as Plaintiff's Exhibit 37-PPPP. Do you  
9 recognize this document?

10 A I've seen this page, yes.

11 MR. SWINTON: And if we could cull out the first two  
12 paragraphs in the article below the image.

13 BY MR. SWINTON:

14 Q So this is a Today Show tech blog post that's summarizing  
15 the findings of a sexting study. And the last sentence in the  
16 first paragraph says:

17 "That nearly one in five Americans who have a smart  
18 phone say that they have used it for sexting. Sharing  
19 explicit photos or text messages with others."

20 It says that this -- in the second paragraph it says  
21 that:

22 "The survey was commissioned by Lookout Mobile  
23 Security and was conducted using a Harris Interactive Poll."

24 So, Dr. Stark, do you have a sufficient amount of  
25 information from this blog post to reliably estimate the

1 prevalence of sexting nationwide?

2 A No. Not from this post alone. I would need to  
3 understand in detail how Harris Interactive does its polling.  
4 How it solicits its -- the group of people for the sample,  
5 what the response rate was, so forth and so on.

6 Q And do you have enough information from this blog post to  
7 know the types of images that participants in the study were  
8 exchanging?

9 A No. It says explicit, but it looks like explicit photos  
10 and text messages are being lumped together, so it's not  
11 possible to know what fraction of those were -- had to do with  
12 explicit images.

13 MR. SWINTON: Your Honor, at this time I have no  
14 further questions. We move to admit Defense Exhibit 197 from  
15 Bates page 2898 to 2968, which is the Curriculum Vitae of Dr.  
16 Stark.

17 THE COURT: It will be admitted. Okay. Cross-exam.

18 CROSS-EXAMINATION

19 BY MR. MURRAY:

20 Q Dr. Stark, I think you indicated -- did I understand you  
21 to say that your hourly rate is \$1,200 an hour?

22 A Yes, sir.

23 Q Okay. And is that the same for trial as it is for  
24 preparing your report?

25 A Yes, sir.



1 Q Okay. And then do you charge for travel time as well?

2 A I typically try to use the travel time to do work related  
3 to the case and charge for that fraction that I'm on task, so  
4 I read documents on the flight, things like that.

5 I am uncomfortable charging for time that I'm doing  
6 something else.

7 Q And how long has that been your rate? You mentioned, I  
8 think, only since January?

9 A I raised my rate from \$1,000 to \$1,200 on January 1st.

10 Q Okay. Now if I understand your testimony today, you were  
11 primarily focused upon the studies that Dr. Drouin and Dr.  
12 Zimmerman did?

13 And giving us the benefit of your criticisms of the  
14 conclusions that they tried to draw from them, is that an  
15 accurate statement of at least part of what you testified to?

16 A Yes, I think that my testimony has been largely about  
17 what there were -- I understand the reports to have relied on.

18 Q Okay. Now you haven't studied the subject yourself, have  
19 you? Sexting.

20 A Sexting? No I have not.

21 Q You've heard about it, though?

22 A Yes.

23 Q It's been in the news?

24 A Yes.

25 Q Okay. Do you remember ever seeing that Samsung

1 commercial with the -- with the wife and the two kinds sending  
2 the husband off to his trip, and the wife clicks the -- her  
3 phone with his smart phone and says, you better not open this  
4 on the plane? Have you seen that commercial?

5 A I actually don't watch television.

6 Q Okay. All right. But you certainly have no reason to  
7 believe that sexting is an isolated phenomenon, just based on  
8 the reports that you've seen, correct?

9 A No.

10 MR. SWINTON: Objection, Your Honor.

11 THE COURT: Overruled.

12 THE WITNESS: I don't have an opinion.

13 BY MR. MURRAY:

14 Q Okay. Now it is true that both Dr. Drouin and Dr.  
15 Zimmerman's studies were published in peer reviewed journals,  
16 correct?

17 A Yes. I think one might have been in press at the time  
18 that it was attached to this, but I think they were both in --  
19 yes.

20 Q Okay. And I think that your main criticism, if I  
21 understood it correctly, was their use of convenience samples,  
22 or in the case of Dr. Zimmerman a form of convenience sample  
23 known as a respondent driven sample, as distinguished from a  
24 random sample, correct?

25 A My main criticism is using samples of that type to

1 extrapolate from their study population to all U.S. young  
2 adults.

3 Q And that's because they didn't use a random sample, but  
4 instead used either a convenience sample, or a form of a  
5 convenience sample known as a respondent driven sample,  
6 correct?

7 A Yes. Generalizing beyond their sample is problematic  
8 because of the nature of the sample.

9 Q Okay. And if I understand correctly, you're saying that  
10 no reliable conclusions then can be drawn from any study,  
11 unless it came from a random sample survey, is that correct?

12 A No, sir. That's not what I intended to say.

13 Q Okay. Does Gallup generally use random samples in their  
14 surveys?

15 A Yes. It does.

16 Q And does Harris generally use random samples in their  
17 surveys?

18 A My understanding is that some of the Harris polls use  
19 random samples, and some use samples of convenience, depending  
20 on what the mode of interview is.

21 Q Okay. Now you were asked about Plaintiff's Exhibit  
22 37-PPPP. And that is a report that was publicized about a  
23 Harris Interactive Survey, correct?

24 A Yes, sir.

25 Q Now you would at least agree with me that Harris is a

1     respected pollstering company, correct?

2     A     Yes, they are.

3     Q     And they've been around for many, many years, correct?

4     A     Yes, sir.

5     Q     Have you ever used them for -- in any research that  
6     you've done?

7     A     No, I have not.

8     Q     Have you ever reviewed any of their surveys in connection  
9     with any of your research?

10    A     I'm not sure what you mean by reviewed.

11    Q     Look at their -- actually seen any of their surveys and  
12    results?

13    A     Well in this particular case, I looked up how the Harris  
14    Interactive poll was done. It's not a random sample, it's a  
15    sample of convenience. It's designed to be something that's  
16    fast and cheap to get a, you know, to get a quick look which  
17    has an unknown accuracy.

18                 It's very different --

19    Q     How did you look it up?

20    A     I'm sorry?

21    Q     How did you look it up?

22    A     I went to Harris's website and explored their description  
23    of their data products and the services that they offer.

24    Q     Well did they on their website, say, report this study?

25    A     I don't specifically recall that study, but the Harris

1 Interactive poll is a tool that they make available to people  
2 to get quick inexpensive answers to questions.

3 Q Well is it your testimony that the website says that  
4 their Harris Interactive poll never uses random sampling?

5 A I don't recall specifically. I -- my general  
6 recollection is that it is not based on a random sample.

7 Q And that their website makes that representation?

8 A I found the information online.

9 Q Okay.

10 A Yes.

11 Q But you didn't find any information about specifically  
12 whether the survey in Plaintiff's Exhibit 37-PPPP was a random  
13 sample or not, or did you?

14 A Honestly, right now, I don't recall.

15 Q In any case, the Harris Interactive poll indicated that  
16 nearly one in five Americans who have smart phones say they  
17 have used it for sexting, sharing explicit photos or text  
18 messages with others, correct?

19 A Yes, sir, that's what it says.

20 Q It also indicates that the biggest age group for sexting  
21 are 18 to 34 year old men, 32 percent. And 35 to 44 year old  
22 women, 25 percent.

23 MR. SWINTON: Your Honor, as we noted on Friday, we  
24 object to this exhibit coming in as evidence, because this is  
25 hearsay.

1 THE COURT: Overruled. It's cross-examination. Do  
2 you understand the question?

3 THE WITNESS: I see that there on the page, yes.

4 BY MR. MURRAY:

5 Q Okay. And the poll was of 2,097 adults, correct?

6 A That's what it says, yes.

7 Q And it says that more than a quarter of adults admitted  
8 "taking or receiving explicit photos with their smart phones."  
9 Correct?

10 A Yes.

11 Q But as expected 18 to 13 year old smart phone owners send  
12 or receive explicit pictures and/or videos much more than  
13 their older counterparts, with 40 percent doing so, correct?

14 A That's what it says, yes.

15 Q And yet it's still not just for the very young, because  
16 even one in ten people age 55 and older with smart phones said  
17 they also sexted, correct?

18 A Yes, sir.

19 Q And then they also said that when it came to videos  
20 instead of just pictures, 11 percent of Americans said they  
21 record explicit videos on their phones?

22 A Yes, sir.

23 Q Now let me ask you something. There's going to be a  
24 presidential election in 2016, correct?

25 A I think so.

1 Q Okay. Without doing a random sampling poll, can you tell  
2 me with some degree of certainty that in that election  
3 millions of voters will vote for the Republican candidate?

4 A Yes.

5 Q And can you tell me that without doing a random sample  
6 polling that millions of Americans will vote for the  
7 Democratic candidate?

8 A Yes. That's not a statistical conclusion, that's just  
9 commonsense.

10 Q Well but it's statistics, it's millions of people are  
11 going to vote for the Republican candidate, isn't that a  
12 number? Isn't that a quantity?

13 A There's two different senses of the word statistics.  
14 There's statistics, as in numbers that get reported in the  
15 press, baseball scores, things like that. And then there's  
16 statistics, the discipline, the scientific study of data and  
17 so forth. So it's statistic in the first sense, it's a  
18 number.

19 But it's not statistics in the second sense, it's  
20 not data based, it's commonsense, it's not the application of  
21 the rules of statistics.

22 Q Well and yet Gallup and Harris are paid lots of money  
23 every presidential election year to do random sample polling  
24 in order to quantify with great precision who's going to vote  
25 for whom, don't they?

1 A They're paid large amounts of money to attempt to  
2 quantify it. I'm not sure that the precision always turns out  
3 to be that great. And, yes, they're paid to do polls taking  
4 random samples.

5 Q Okay. But if the question at issue were whether or not  
6 millions of people are going to vote for the Republican  
7 candidate, you wouldn't need to do a random sample survey to  
8 arrive at a reliable conclusion, would you agree with that?

9 A I could arrive at something that I feel quite confident  
10 about as an ordinary human being without taking a random  
11 sample, and doing Statistics, with a capital S, but that  
12 conclusion is not a Statistical, with a capital S, conclusion.

13 I can't quantify the uncertainty in that in any  
14 statistically meaningful way. But, yes, as a commonsense  
15 proposition, I'm quite confident that millions of people will  
16 vote for both parties.

17 Q Okay. Now I want to ask you something about your report,  
18 Doctor. In it, and this is page five of your report. Do you  
19 see that you have a section in your report that quotes the  
20 reference guide on survey research in the Federal Judicial  
21 Center Reference Manual on Scientific Evidence?

22 A Yes, sir.

23 Q And I think you referenced that manual in your direct  
24 testimony on direct examination?

25 A Yes, sir.



1 Q And one of the things that that reference guide for the  
2 Federal Judicial Center states, according to your report, is  
3 that:

4 "Quantitative values computed from samples of  
5 convenience should be used as rough indicators rather than as  
6 precise quantitative estimates."

7 Correct?

8 A Yes, sir.

9 Q Now I'm going to get back to them in a minute. But do  
10 you see that just before the quote that I just read to you,  
11 you have three dots?

12 A Yes.

13 Q And is that because you omitted language that preceded  
14 that quote?

15 A It's intended to be an ellipsis mark, yes.

16 Q Okay. I want to show you from the -- well you cite pages  
17 242 to 244 of that, correct?

18 A Yes, sir.

19 Q I want to show you page 244 of that manual. Do you see  
20 that it's the reference manual on scientific evidence?

21 A Yes, sir.

22 Q And just looking at the cover page, it's the second  
23 edition, which is 2000. The year 2000?

24 A Yes.

25 Q And that's the one that you were quoting from?

1 A I believe so.

2 Q We can put it back up there.

3 A I have a couple of different copies of this at home.

4 Q You see 2000, reference guide?

5 A Yes.

6 Q Okay. Now if you look at page 244 where that quote about  
7 quantity came, the manual says this, does it not?

8 "Although probability samples..."

9 And I'm reading from the first -- actually the  
10 second -- the new paragraph.

11 "Although probability sample surveys often are  
12 conducted in organizational settings, the recommended sampling  
13 approach and the academic and Government publications on  
14 surveys probability sample surveys can be expensive when  
15 in-person interviews are required, and the targeted population  
16 is disbursed widely, or qualified respondents are scarce."

17 Correct?

18 A Yes, sir.

19 Q It then goes on to say then:

20 "A majority of the consumer surveys conducted for  
21 Lanham Act litigation, present results from non-probability  
22 convenience samples. They are admitted into evidence based on  
23 the argument that non-probability sampling is used widely in  
24 marketing research, and that 'results of these studies are  
25 used by major American companies in making decisions of

1 considerable importance.'" "

2 A Yes, sir.

3 Q And that's all true, isn't it?

4 A To the best of my knowledge that's true.

5 Q So major American companies make big economic decisions  
6 based on convenience samples, according to that article,  
7 correct?

8 A They risk their money on the basis of a convenience  
9 sample.

10 Q Now getting back then to the part of the quote that you  
11 did have in your report, it says here:

12 "Quantitative values computed from samples of  
13 convenience should be viewed as rough indicators, rather than  
14 as precise quantitative estimates."

15 Correct?

16 A Yes, sir.

17 Q So according to the Federal Judicial Center that you're  
18 quoting, a convenience sample can give us some valuable  
19 information as a rough indicator, so long as we're not  
20 concerned with precise quantification, isn't that true?

21 A I think it says that it -- valuable, I didn't see in the  
22 quote. Rough, I don't know exactly what rough means. But  
23 that's what the words say.

24 Q Well that's what you quoted from that Federal manual,  
25 correct?

1 A I didn't quote the piece about rough estimates, you  
2 brought up the piece about rough estimates.

3 Q Rough indicators.

4 A Oh rough -- I'm sorry rough indicators. Yes rough  
5 indicators.

6 Q Didn't you quote that part?

7 A Yes.

8 Q Okay. So just for example, the question isn't the  
9 precise number of Americans who are sexting, but just a rough  
10 indication of it, then samples of convenience, according to  
11 that document, might be able to give us some information on  
12 that subject, correct?

13 A Again, the problem is that there's no way to quantify the  
14 likely error in making the estimate on the basis of a sample  
15 of convenience. So the word rough doesn't say that it's good  
16 to within 10 percent, 20 percent, 50 percent, 90 percent.

17 It's not a quantitative statement, and there's no  
18 way to make a quantitative statement on the basis of a sample  
19 of convenience.

20 Q So you disagree then with -- with what you just quoted,  
21 that a convenience sample shouldn't have used as a rough  
22 indicator, rather than as a precise quantitative estimate?

23 A I agree with the quotation. The issue is, what does  
24 rough mean?

25 Q Okay. Well I'm not asking you for a definition of rough,

1 but I'm just asking whether you agree that according to the  
2 manual that you cite convenience samples can be viewed as  
3 rough indicators of the question that is being examined?

4 A Yes, sir I agree that that's what it says.

5 MR. SWINTON: Asked and answered, Your Honor.

6 THE COURT: Overruled.

7 BY MR. MURRAY:

8 Q Now there was one other thing about your report that I  
9 found somewhat interesting. And that is when you were talking  
10 about Dr. Drouin's report, you had a whole paragraph there  
11 about your own experience at various universities, in various  
12 capacities for more than 36 years, is that correct?

13 A Yes, sir.

14 Q And how you had taken courses at seven universities and  
15 lectured at many others, and taught in various universities.  
16 Is that correct?

17 A Yes, sir.

18 Q And then you said:

19 "Firsthand experience tells me that on the whole  
20 psychology majors are not exactly like philosophy majors,  
21 physics majors, math majors, et cetera, and that students at  
22 one university are not exactly like the others."

23 You see all that?

24 A Yes, sir.

25 Q Now you're one university professor, correct?

1 A I am.

2 Q And if one were trying to answer the question of whether  
3 or not undergraduate majors in philosophy, and physics, and  
4 math, and economics are the same or different on various  
5 matters, you would need to sample more than one person,  
6 wouldn't you?

7 A I think that it's not the right way to frame the issue.

8 Q Well if --

9 A The issue is --

10 Q Could you answer that question? If I wanted to find out  
11 the answer to the question of whether or not psychology majors  
12 are not exactly like philosophy majors, for example, I would  
13 need to ask more than one person in my survey, would I not?

14 A You would need to ask more than one student. You would  
15 need to have experience with more than one student. You can't  
16 see that there's a difference between the students unless  
17 you've seen more than one student.

18 Q Well if I wanted to know what university professors who  
19 had had experience in a wide range of universities believed  
20 about whether or not philosophy majors are the same as  
21 economics majors with respect to certain attitudes, could I  
22 rely upon a sample of one university professor in order to  
23 arrive at that answer?

24 A If you wanted to do an opinion poll of university  
25 professors, you would need to do an opinion poll of university

1 professors.

2 Q Right. And a sample of one, would not do would it?

3 A A sample of one would not give a reliable estimate of  
4 what university professors as a whole think. You would need a  
5 random sample of university professors, if you were interested  
6 in the distribution of their opinions.

7 Q Now let me ask you this, Doctor, the -- you had mentioned  
8 that you testified for the -- you've worked for the Department  
9 of Justice before, correct?

10 A Yes, sir.

11 Q In I can't remember how many cases, but at least a  
12 couple, correct?

13 A Yes, sir.

14 Q Okay. And one of the cases that you worked on was in the  
15 COPA case, the Child Online Protection Act --

16 A Yes, sir.

17 Q -- challenge?

18 A In fact, I think it was tried in -- not before Your  
19 Honor, but in this District Court.

20 THE COURT: Judge Reed. Yes.

21 THE WITNESS: Yes, sir.

22 BY MR. MURRAY:

23 Q Correct? And you were asked by the Government in that  
24 case to do a study of the quantity of sexually explicit  
25 material available on the web, and to determine the extent to

1 which filters could be used to block that material. Was that  
2 essentially what you were asked to do?

3 A Yes.

4 Q Okay. And that took a lot of work to do that, didn't it?

5 A Yes.

6 Q And just -- can you just give us an estimate as to how  
7 much that work cost to get the answer to that question?

8 A I have no idea.

9 Q Was it hundreds of thousands of dollars?

10 A I'm sure it was.

11 Q Okay. And how much money would it cost to do a properly  
12 constructed random sample, approximately, of adults in the  
13 United States on the question of the prevalence of sexting?

14 MR. SWINTON: Objection, Your Honor, this is  
15 irrelevant and speculative.

16 THE COURT: Well he -- if you have any idea, you can  
17 answer.

18 THE WITNESS: There are many ways one could go about  
19 doing it. One would be to piggyback it onto one of the  
20 regular probability samples that's done, like the National  
21 Research Center at the University of Chicago conducts roughly  
22 annual general societal surveys, which have been used to  
23 measure online behavior.

24 So adding a question or two to that survey would be  
25 a very inexpensive way to go about -- to go about doing it.



1 BY MR. MURRAY:

2 Q Well then let me ask you this. In this case, did the  
3 Government ask you to conduct such a survey so that the  
4 quantity of adult Americans who in fact do engage in sexting  
5 could be reliably and precisely ascertained?

6 A No, they did not.

7 MR. MURRAY: May I have a moment, Your Honor?

8 THE COURT: Sure.

9 (Pause)

10 MR. MURRAY: I have no further questions. Thank you.

11 THE COURT: Any redirect?

12 MR. SWINTON: Just a few questions, Your Honor.

13 THE COURT: Yes. Go ahead.

14 REDIRECT EXAMINATION

15 BY MR. SWINTON:

16 Q Dr. Stark, I'd just like to take one more look at  
17 Plaintiff's Exhibit 37-PPPP. And this is a, as we discussed  
18 on direct, this is a Today's Show tech blog post summarizing  
19 the survey that was commissioned by Lookout Mobile Security.

20 Now, Dr. Stark, do you know just on the basis of  
21 this blog post whether this was a random sample?

22 A No.

23 Q And do you know on the basis of this blog post how  
24 sexting was defined in the survey?

25 A No, sir.

1 Q And what does it mean that the survey was sponsored by  
2 Lookout Mobile Security?

3 A I suspect they thought it would help their business to  
4 have some information out there. My understanding of what  
5 Lookout Mobile Security does is provide the ability to locate  
6 or wipe the contents of your cell phone if it gets lost.  
7 Presumably, if it's generally believed that this a big  
8 problem, that would be good for their business. At least  
9 their stock.

10 Q And you were also asked on cross-examination about  
11 samples of convenience, and particularly you looked at an  
12 excerpt from your expert report discussing that.

13 If you were to use a sample of convenience in a  
14 study, or in making an estimate, would you want to explain why  
15 you were using such a sample of convenience?

16 A I would want to explain why it wasn't practical or  
17 possible to do something better. I would include disclaimers  
18 explaining that it's not possible to generalize the results  
19 reliably.

20 I believe that Dr. Drouin included such disclaimers  
21 in her research papers.

22 Q And I think you were also asked about on cross the two  
23 different types of statistics, kind of in the numerical sense,  
24 then also more in the scientific sense. Is a Google search a  
25 way of getting a statistic in the scientific sense?

1 A I guess it depends on the Google search. But in general,  
2 it's a lower case statistic, it gives you a number but --

3 Q So --

4 A Could you be more --

5 Q Just looking at the number of Google hits, is that  
6 statistics in the scientific sense?

7 A If you're trying to measure something about Google, you  
8 might be able to get information about Google from running  
9 queries and finding out how many hits Google reports. But  
10 that's a different question from whether the number that  
11 Google reports bears much relationship to what's out there on  
12 the web.

13 I'm not quite sure whether I'm answering your  
14 question.

15 Q I think that's fine.

16 MR. SWINTON: No more questions, Your Honor.

17 THE COURT: All right. Any recross?

18 MR. MURRAY: Yes, Your Honor. And I would ask  
19 permission to reopen the cross to just ask one question that I  
20 forgot to ask while I was --

21 THE COURT: Sure. Not a problem.

22 RE CROSS-EXAMINATION

23 BY MR. MURRAY:

24 Q I forgot to ask you, Doctor, about the section in your  
25 report where you also quote sampling techniques from Cochran

1 (phonetic) in 2002, do you see that reference?

2 A Yes, sir.

3 Q And he says:

4 "About the only way of examining how good a sample  
5 of convenience may be is to find the situation in which the  
6 results are known, either for the whole population or for a  
7 random sample, and make such -- and make comparisons. Even if  
8 a method appears to do well in one such comparison, this does  
9 not guarantee that it will do well under different  
10 circumstances."

11 Do you see that?

12 A Yes, sir.

13 Q Now and you did mention that Dr. Zimmerman did do that by  
14 comparing the answers that he got on drug use to the answers  
15 that were given on that subject in a random sample recognized  
16 study, do you recall that?

17 A I'm not sure whether the comparison was to a random  
18 sample, but he did make such a comparison between two studies  
19 for that variable.

20 Q Okay.

21 A But there was no opportunity for him to make a comparison  
22 between the sexting rate, the variable of interest, and a, you  
23 know, a solid study on that topic. Because to my  
24 understanding, there was no such solid study on that topic to  
25 make the comparison with.

1 Q No, I understand that. But if you compare the answers  
2 that you got on the questions of drug use, to the answers that  
3 were obtained on a recognized national study that was done  
4 appropriately, that will give you some indication as to  
5 whether or not, at least on those questions, your sample is  
6 representative, won't it? Isn't that what this author says?

7 A On the issue of drug use.

8 Q Okay.

9 A Not on the issue of something else.

10 Q Okay. Now you mentioned that the survey that was done by  
11 the Harris Interactive poll was commissioned by a company that  
12 has a particular business reason in terms of some application  
13 that it offers, correct, on its technology?

14 A Yes.

15 Q Okay. And so a company in the United States that wants  
16 to make money oftentimes wants to find out how many potential  
17 customers there are out there for a particular product of its,  
18 correct?

19 A Yes, absolutely.

20 Q And so they sometimes commission a study like the one in  
21 Plaintiff's Exhibit 37-PPP (sic) to get information about, for  
22 example, how many people in America are sexting?

23 A Yes.

24 Q So that they can make some marketing decisions about  
25 whether or not it's a big enough market, for example, and

1 enough potential customers to invest a sum of money in trying  
2 to reach those people, correct?

3 A Yes.

4 MR. MURRAY: That's all I have.

5 THE COURT: Okay. All right. Thank you, Doctor.

6 THE WITNESS: Thank you very much.

7 THE COURT: Okay. First of all, I would like to  
8 give you a break and take one myself. But I'd like to keep it  
9 short. Is a half hour enough time before we have the  
10 closings?

11 COUNSEL: Yes, for us it is, Your Honor.

12 THE COURT: So we'll resume at 1:00. Now what I  
13 would like to do is give each side 45 minutes. You don't have  
14 to take 45 minutes, but you're welcome to -- if you want to  
15 reserve -- I have another hearing in a criminal case at 2:30,  
16 that's one reason, but you're going to have briefing. And let  
17 me just explain -- because I've rethought about the briefing.  
18 And this is how I would like it to go.

19 Now if you want to -- I would rather have 45 minutes  
20 basically for you to set forth your view of what I should do  
21 with the facts and as the law, but I would prefer -- and I'm  
22 not going to dictate it, I'm not going to interrupt you, but I  
23 would prefer that you focus most of your time on the facts.

24 Because you're going to have the opportunity to  
25 brief the law, and I'm not going to put any page limits on

1 your initial brief. But here's my thought of where the  
2 briefing should go, and it's different then before.

3 Because I thought about it over the weekend. I  
4 would like you both to file simultaneous briefs on all the  
5 issues. And I think that -- and when you argue, you're  
6 welcome to tell me that any of my factual findings were wrong,  
7 or I should reconsider them, or things like that.

8 But if you don't argue -- and you're welcome to put  
9 that in your brief as well. But I would prefer that you let  
10 me know as part of the oral argument proposed factual findings  
11 that you think are unsupported by the evidence.

12 Now if I said somebody was honest and you think they  
13 were liars, that's going to be hard to convince me that I'm  
14 wrong about that, because I think that's something that's  
15 completely in my discretion, just like it is with a jury.

16 But if you think I overemphasized something, or I  
17 left something out, I would like to know that. The law is  
18 something that I would anticipate would be fully developed in  
19 your briefs. And we'll do simultaneous briefing on all the  
20 issues.

21 Now as far as the reply briefs go, here's how I've  
22 decided it should be. The Government has the burden of proof,  
23 in my view, on the First Amendment issues, and the plaintiffs  
24 have the burden of proof on the Fourth Amendment issues.

25 MS. WYER: Your Honor?

1           THE COURT: Let me just finish. So that's what the  
2 law is clearly about, narrow tailoring. So the reply brief,  
3 the Government should deal with the First Amendment issue.  
4 And on the reply -- and the plaintiffs deal with the Fourth  
5 Amendment issue. That would make the most sense to me. Now  
6 if anybody -- Ms. Wyer, do you have any violent objections to  
7 that?

8           MS. WYER: Well I just wanted to point out that on  
9 the overbreadth claim, the plaintiffs clearly bear the burden  
10 on that claim.

11          THE COURT: Well I don't think that's the law.  
12 There's a case called the Redden case -- on the overbreadth, I  
13 don't know that that's right. I think it's more appropriate,  
14 given what the Third Circuit did, for the Government to file a  
15 reply brief -- on the opening brief, you're welcome to take  
16 any position you want. Okay?

17          But on the reply brief, I would like the Government,  
18 the reply brief to be limited to the First Amendment issues,  
19 and the plaintiffs' reply brief to be limited to the Fourth  
20 Amendment issues.

21          And I'm going to provide a fairly short time for the  
22 reply brief, and I'm going to limit it to 15 pages. All  
23 right? Because I -- and I'm going to shorten the time I had  
24 in mind.

25          What I have in mind for timing, and if you have



1 personal problems, or things like that this is unreasonable,  
2 now is the time to speak up. Or if you want to think about it  
3 with your colleagues on recess and we can -- when we come back  
4 at 1:00, you can let me know if this poses some hardship on  
5 you.

6 All right. I would like the initial briefs to be  
7 filed by Friday, June 28th. Okay? And I would like the reply  
8 briefs to be filed -- now if that is a problem, I could extend  
9 that to, you know, Monday, July 1st. But I would rather have  
10 them on Friday.

11 As far as the reply briefs go, I would like them to  
12 be filed by Friday July 5th. But if there was a real  
13 hardship, I could deal with July 8th. Okay? That's how I  
14 think the briefing should go. So talk to your colleagues, and  
15 we'll take a recess now and we'll resume at 1:00. Okay?

16 MS. WYER: Your Honor just one more thing? We  
17 wanted to move two additional Exhibits into evidence.

18 THE COURT: To what?

19 MS. WYER: We have two additional Exhibits we just  
20 wanted to move into evidence.

21 THE COURT: Exhibits?

22 MS. WYER: Yeah, they're already among the Exhibits  
23 we originally identified but --

24 THE COURT: All right. Well look I would prefer --  
25 every exhibit that has been used has been admitted. It's just

1 a question of compiling a list and having a copy. Okay? So  
2 that's -- I think that's the most expeditious way to do it.

3 MS. WYER: We just wanted to move Exhibits 14 and 15  
4 into evidence.

5 THE COURT: Fine. I'll admit anything that's been  
6 used in open Court. Thank you. And I'll extend the same to  
7 the plaintiffs when we come back. All right. So we'll resume  
8 at 1:00. Thank you.

9 (Recess taken, 12:25 p.m. to 1:06 p.m.)

10 THE COURT: Please be seated. Janice, we'll -- I  
11 promised to give 45 minutes to each side, so we'll be about an  
12 hour and a half. So if the lawyers in the criminal case come,  
13 just tell them to wait outside or so. Okay?

14 All right. Have you discussed at all or do you have  
15 any views about the briefing schedule?

16 MR. MURRAY: We're fine with the early schedule  
17 you --

18 THE COURT: All right. June 28th and July 1st for  
19 the reply briefs. Is that all right with the Government?

20 MR. MURRAY: July 5th.

21 THE COURT: July 5th. Yes. Excuse me. July 5th.  
22 All right. And we'll follow what I said about the reply brief  
23 on the issues limited to 15 pages each. I'm not going to put  
24 any of this in an order.

25 Okay. All right. Mr. Murray?

1 MR. MURRAY: Thank you, Your Honor. May it please  
2 the Court, the first thing I want to do on behalf of my law  
3 partner Ms. Baumgardner, and all of our clients, is thank the  
4 Court for its careful attention to the evidence.

5 It has been a true pleasure appearing in front of  
6 Your Honor, I've got to tell you, and I know you've given  
7 serious consideration to this and we all thank you for that.

8 THE COURT: I am, and I'm still doing it. I want to  
9 thank you for being very well-prepared and representing your  
10 clients in the best tradition of the law and advocacy. And  
11 it's obviously you're an expert in this field, and I think  
12 I've learned a lot. And I have not yet decided how I'm coming  
13 out, but I'm interested in hearing what you have to say.  
14 Thank you.

15 MR. MURRAY: Thank you, Your Honor. And I also want  
16 to tell you your staff has been most gracious and we feel most  
17 welcome and hospitable.

18 THE COURT: Well that's the way it ought to be.

19 MR. MURRAY: And I also want to give a special  
20 thanks to your law clerk Sarah (phonetic), who I know has  
21 worked tirelessly on this case.

22 THE COURT: Yes. She's still working on it.

23 MR. MURRAY: And is going to continue to do.

24 As you have stated several times, this case is a  
25 serious one involving serious First and Fourth Amendment

1 issues. And it's interesting, I think the timing of the trial  
2 is auspicious as well. Because more than once, Your Honor has  
3 mentioned the efforts to ban James Joyce's novel Ulysses.

4 And yesterday it was Bloomsday.

5 THE COURT: Right. And the Rosenbach Museum here in  
6 Philadelphia every year sponsors a reading of the whole novel.

7 MR. MURRAY: Yes.

8 THE COURT: And my wife and I are always one of the  
9 readers.

10 MR. MURRAY: Wonderful.

11 THE COURT: And have been for many years.

12 MR. MURRAY: Well then and so --

13 THE COURT: So I'm very familiar with it.

14 MR. MURRAY: Yes. And so the timing of the trial  
15 was auspicious as well. At the outset, I want to emphasize  
16 that if the Court strikes down 2257 and 2257(a), Congress will  
17 not be without a remedy.

18 They can fix it, they can repair it. They can pass  
19 a much more narrowly tailored and less burdensome scheme  
20 requiring at least commercial producers, who are primary  
21 producers of sexual images, to check ID's and to verify that  
22 they're particularly youthful employ -- performers are of age.

23 It would be somewhat similar to the I-9 requirement  
24 for employers when it comes to immigration. So this is not a  
25 situation, Your Honor, where, if we were to prevail, that

1 we're suggesting that Congress could never pass a more  
2 narrowly tailored, properly less burdensome law. And no doubt  
3 they probably would attempt to remedy it.

4 I want to begin as the Supreme Court teaches us in  
5 Stevens, with a clear delineation of the scope of the Statute  
6 in terms of the images that it covers. Because you can't talk  
7 about narrow tailoring or overbreadth without first getting an  
8 understanding of how broad the language is.

9 We know that any image that depicts actual or  
10 simulated sex acts of any kind are covered, masturbation,  
11 sadistic or masochistic abuse, and lascivious exhibition of  
12 the genitals, or pubic area all are covered by the Act.

13 And we're talking about any image. Photographs,  
14 pictures, websites, films, videos. And it's important to  
15 recognize just how broad the concept of lascivious exhibition  
16 of the genitals and pubic hair is. The very first Court to  
17 consider 2257, and actually struck it down when it was first  
18 passed because it created an unconstitutional presumption,  
19 dealt with what was meant by lascivious exhibition of the  
20 genitals.

21 And that Judge wrote that when he parsed it, he  
22 ultimately concluded:

23 "It is fair to conclude that any frontal nude image  
24 of a person in what might otherwise be called an erotic pose,  
25 is likely to be included as lascivious."

1           So I think it's fair to say that any nude image of  
2   an erotic nature, as opposed to perhaps a nude image in a  
3   medical textbook on anatomy, but if you're talking about  
4   erotic photos or images of nude people, that it's fair to  
5   conclude those people are at risk of it being a lascivious  
6   exhibition of the genitals.

7           And it's even broader than that. Because U.S. v.  
8   Knox, the Third Circuit has already held that lascivious  
9   exhibition of the genitals does not require nudity. And that  
10   the clothed genitals can come within that term lascivious  
11   under this very definition in the child pornography laws.

12           And the Department of Justice has adopted that very  
13   proposition in their interpretation of lascivious exhibition  
14   of the genitals in their preamble to the most recent iteration  
15   of the regulations.

16           They specifically reject the notion that nudity is  
17   required as a precondition of a -- of an image coming within  
18   the term lascivious exhibition. And so we know how broad that  
19   term is.

20           Similarly, when it comes to simulated sex acts, and  
21   simulated masturbation, and simulated sadomasochism, the  
22   Justice Department in its preamble at page 77-440, again,  
23   emphasizes that nudity is not necessarily required in order  
24   for something to come within the meaning of simulated sex.

25           They say the producer of the depiction may arrange

1 the camera or the body positions to avoid depicting uncovered  
2 genitals, breasts or buttocks, yet still cause harm to the  
3 putative child by having him or her otherwise realistically  
4 appear to be engaging in sexually explicit conduct.

5 And so when they apply to images of adults, you  
6 don't even have to have nudity for purposes of simulated sex.  
7 And so that's just how -- that's how broad the sexual images  
8 are that are covered by the law. Now in terms of the coverage  
9 of the Statute, Your Honor, that is equally broad, and the  
10 Third Circuit has so held.

11 Whoever, anybody, whoever produces any book,  
12 magazine, periodical, film, videotape, digital image,  
13 digitally or computer manipulated image, picture or other  
14 matter which has the sexual images -- and this is the  
15 interstate commerce part that Your Honor asked about -- so  
16 long as it contains a sexual image created after November of  
17 '90 and is produced in whole or in part with materials which  
18 have been mailed or shipped in interstate or foreign commerce.

19 Now it is -- that's no limitation at all. The  
20 interstate commerce. The is not a typical statute that says  
21 you got to actually transport the offending image across state  
22 lines. The only requirement is that the equipment that you  
23 use to take the picture or to create the film had to be in  
24 part made from materials that passed interstate commerce.

25 And I can't imagine a single creation of a single

1 image that can be accomplished by the use of equipment and  
2 technology, that has not been produced in whole or in part  
3 with materials which have been mailed or shipped in interstate  
4 commerce.

5 So that's no limitation at all. And the Third  
6 Circuit made it clear that it applies to every creation of an  
7 image, including private, non-commercial images, even those  
8 created by a husband and wife in the privacy of their own  
9 home.

10 And so that's how broad it is. And as Your Honor  
11 asked in one of the questions, it is true that when the  
12 Statute was first enacted in '88, sexting did not exist, the  
13 internet was just on the horizon. We didn't have Facebook, we  
14 didn't have Twitter, we didn't have all the technologies that  
15 are now available that citizens of the United States use to  
16 share information with each other, including sexually explicit  
17 images.

18 But the Statute covers them all. And as we'll be  
19 seeing, it renders the Statute substantially overbroad as a  
20 consequence.

21 Now the Third Circuit was pretty clear that the  
22 intermediate scrutiny test, I should say they were pretty  
23 clear in what they wanted to hear about in terms of the narrow  
24 tailoring part of the intermediate scrutiny test. Which of  
25 course as Your Honor is correct, the Government bears the



1     burden of proving that the Statutes are constitutional under  
2     intermediate scrutiny, and under the narrow tailoring test.

3             And the Third Circuit was pretty clear, we cannot  
4     accurately compare the amount of -- and this was on their  
5     narrow tailoring discussion.

6             "We cannot on this record, motion to dismiss,  
7     accurately compare the amount of plaintiff's constitutionally  
8     protected speech that does not implicate the Government's  
9     interest in protecting children. For example, speech  
10    involving performers who are obviously adults, to the amount  
11    of plaintiff's speech that implicates the Government's  
12    interest. Example, speech involving performers who are not  
13    obviously adults. This comparison is essential to our narrow  
14    tailoring analysis."

15            And so that's the question -- one of the many  
16    questions -- several questions that they wanted us to answer  
17    by this record.

18            And it seems to me, Your Honor, that the record is  
19    abundantly clear that under that test the, Statutes flunk  
20    narrow tailoring.

21            We had two experts who opined on that very question.  
22    We had the Government's expert, Dr. Dines, and we had Dr.  
23    Linz, the plaintiff's expert. Dr. Dines was of the view that  
24    one-third of the commercially produced material would be in  
25    the confusing area.

1 Which means that two-thirds of it is non-confusing  
2 material, where it's apparent that the performers are  
3 obviously adults. Dr. Linz puts the percentage much higher  
4 than 67 percent. And, of course, we had Dr. Biro's testimony  
5 that is totally consistent with that, because he agrees, look,  
6 ages 12 to 13 and younger, nobody's going to confuse them as  
7 adults.

8 That's not what the Statute was directed at. And  
9 generally speaking people over the age 25 are not going to be  
10 confused as minors, with some limited exceptions. And so the  
11 confusing range, according to Dr. Biro, is basically ages 14  
12 to 24.

13 And so that's pretty consistent with what the  
14 analysis of both experts, when you put that together with  
15 them. So we have a situation where the only thing the record  
16 shows right now is that at least two-thirds of the  
17 commercially produced, sexually explicit material, is of  
18 people who are obviously adults when you look at the material.

19 And probably it's higher than that. But by any  
20 version of narrow tailoring, no matter how you define it,  
21 whether it's under the Redden test, whether it's under Ward,  
22 the Rock versus -- the rock concert case, whether it's the  
23 Third Circuit's opinion in this case.

24 The question is, does the Statute burden  
25 substantially more constitutionally protected speech than is

1 necessary? Now matter how you cut it, if it burdens at least  
2 two-thirds of the regulated speech unnecessarily, based on the  
3 Third Circuit's formulated test, I don't know how anyone could  
4 come to the conclusion that it is narrowly tailored.

5 It flunks every narrow tailoring test that one can  
6 imagine. It doesn't do any better when you take it to the as  
7 applied standard as well. When you look at particular  
8 plaintiffs. There, the Third Circuit wrote and I'll quote:

9 "That the statute may be narrowly tailored..."

10 Interesting that they said may, not for certain, but

11 --

12 "... may be narrowly tailored as applied to a  
13 particular plaintiff, if the particular plaintiff produces  
14 'depictions of predominantly youthful looking performers.'"

15 So the question is, in any given plaintiff's body of  
16 work, does it predominantly depict youthful looking  
17 performers, or does it predominantly depict person who are  
18 obviously adults?

19 And for that, one of the things we can turn to is  
20 the Government's analysis -- and we can't do it at the moment.  
21 But I'll do it orally. You may recall they have a chart that  
22 their paralegal prepared, based on some of the discovery  
23 materials.

24 Betty Dodson --

25 THE COURT: Does that have an exhibit number?

1 MR. MURRAY: Yes. That's Defendant's Exhibit 314A.  
2 Betty Dodson, as a plaintiff. Seventy-five percent of her  
3 material is of persons over the age of 25. Even 55 percent of  
4 her material is of persons over the age of 30. Even Marie  
5 Levine, 67 percent -- 66 percent of her material is of persons  
6 over the age of -- of 25. And even -- almost 60 percent is  
7 over 30.

8 Mr. Levingston, 56 percent of his images are of  
9 persons over 25. They analyzed Barbara Nitke, and there were  
10 63 percent of her images over the age of 25. Sinclair  
11 Institute, again, for their primary producer materials.  
12 Seventy-nine percent over the age of 25. Almost 67 percent  
13 over the age of 30. Vivid Entertainment, now this one is  
14 significant, Your Honor, because Vivid is one of the major  
15 producers of adult films. And they provided a rep -- you  
16 know, some sampling of their material. And they do  
17 exclusively the adult films.

18 Not necessarily for educational value, but just the  
19 adult films. And even in their case, 60 percent of their  
20 images were of persons over the age of 25. Which, again, is  
21 -- it seems to me very significant.

22 They didn't provide any figures for David Steinberg  
23 or for Barbara Alper. But when you look at Barbara Alper's  
24 body of work, which is in evidence, nearly all of it is, of  
25 obvious adults. And David Steinberg's body of work is now in

1 evidence.

2 And he calculated it as follows. And anybody can  
3 check his arithmetic, because the exhibit is in evidence from  
4 which he gained it. Eighty-eight percent of the images he  
5 produced are of people over 25. Seventy-six percent of the  
6 images are of people over 30. And even 45 percent are of  
7 people over 40. There were only three people that he had ever  
8 depicted who were age 19.

9 And so clearly the -- as applied challenges of those  
10 plaintiffs are meritorious as well. Now let's talk briefly  
11 about the overbreadth question. Because, again, the Third  
12 Circuit gives us two paths by which to determine whether this  
13 Statute is unconstitutionally overbroad. Each of them  
14 independent. If one of them is met, it's overbroad.

15 But if the other one is met it's also overbroad.  
16 The first test is the same one pretty much is narrow -- narrow  
17 tailoring. Namely, how much material out there is of obvious  
18 adults, compared to how much material is out there of youthful  
19 looking actors and actresses who could be confused as minors.

20 And the same evidence that supports a finding of  
21 unconstitutionality under narrow tailoring, supports the same  
22 finding on the overbreadth as well. But there's a second way  
23 that the Statute would be overbroad.

24 And that is, plaintiff should be permitted to  
25 develop the record as to whether the statutes are

1 unconstitutionally overbroad, based on their purported  
2 regulation of purely private conduct.

3 And that's an independent, separate path to  
4 unconstitutionality. Now this record -- keep in mind, Your  
5 Honor, and we'll reiterate this again in our briefs.  
6 Overbreadth usually isn't determined because people have in  
7 evidence. When you go back and you read Stevens, they thought  
8 it overbroad based on examples given by amicus in the Supreme  
9 Court as to how it would apply.

10 And the Third Circuit talks about how in determining  
11 overbreadth you have to come up with reasonable  
12 hypothetical's. This is one of the rare cases where we  
13 actually put in evidence at the trial Court record of  
14 overbreadth rather than just give hypothetical examples.

15 And so we put in all this evidence of sexting. And,  
16 yes, they complain that the -- that the studies weren't done  
17 by random sample, and they complain that the definitions used  
18 were not a perfect match with the Statute.

19 But the one thing those surveys and the other  
20 evidence shows, is there are millions of young adults, let  
21 alone adults over the age of 24, which have sent or received a  
22 sexually explicit sext message.

23 Yes there are other messages that are sexually  
24 suggestive, nude, or nearly nude that might not be captured  
25 under the Statute, but one thing is clear is that there is a

1 substantial amount of it. It's got to be in the millions of  
2 just young adults.

3 And then we had Dr. Linz come in. And he's been  
4 studying this stuff for 30 years. And we showed him all the  
5 massive evidence that we have accumulated in Plaintiff's  
6 Exhibit 37 and Plaintiff's Exhibit 116. And he confirms tens  
7 and tens of millions of Americans are sharing sexually  
8 explicit images on the various means that technology now makes  
9 available. Including the social networking sites, that when  
10 you see them, the millions and millions of numbers that they  
11 confirm are accruing on, you know, a weekly basis, it's just  
12 enormous.

13 And then you add to that these other tech -- I got  
14 to show you just a couple -- well the Elmo's is not on. Just  
15 a couple of examples, Judge, of what the record shows on some  
16 of these -- here's something called Face Time. And this is a  
17 new technology, and we've all maybe seen it on TV.

18 But you can actually go on your computer now and  
19 see the other person at a distant location. And these Face  
20 Time computer links are now being used for couples who are  
21 separated, the husband is on one place, the wife is in  
22 another, and now they're having phone sex where they actually  
23 depict it to each other, so they take advantage of technology  
24 to, you know, continue their intimate relationship when  
25 they're away from each other.

1           It's there. It's all over the place. This  
2   instaporn, is amazing. This instagram, people share images  
3   with each other, again, in a private -- private way. The more  
4   graphic photos show people masturbating.

5           While others -- over 135,000 photos. So what  
6   happens is, when we go on this Instagram, and you tag terms  
7   such as SEXtagram, instaporn, it summons up tens of thousands  
8   of images of genitalia and nude or nearly naked men and women  
9   posing provocatively in their beds, in bathrooms, or with a  
10   partner in a similar state of undress. These are private  
11   citizens.

12           These aren't commercial producers. Then there's  
13   information about the rise of virtual sex, there's a Skype --  
14   this is unbelievable, Your Honor.

15           The Skype, there's a product out that the husband  
16   can have one device with him, while he's away from home, and  
17   the wife can have another one, and then they can go on this --  
18   on this Wii technology, and they can actually engage in  
19   virtual sex by these images to each other.

20           These are husbands and wives. So the -- and there's  
21   more in Plaintiff's Exhibit 37.

22           THE COURT: Just one question. I understand your  
23   argument about husband and wives. But what would you -- where  
24   would you draw a line? Do you have to be formally married?  
25   Suppose it's a common law marriage? Suppose they're going



1 steady? Suppose they're engaged, or they're just casual  
2 acquaintances?

3 MR. MURRAY: It's all constitutionally protected,  
4 Your Honor. If you go back to --

5 THE COURT: Well how about Vivid, is that  
6 constitutionally protected too?

7 MR. MURRAY: Well it's constitutionally protected  
8 speech. I mean, no one disputes that.

9 THE COURT: No, I understand that. But you're  
10 saying they should be exempt from the law because they're --  
11 if they -- if Vivid -- if a husband -- I understand -- your  
12 strongest argument, and it is a strong argument, is the  
13 husband and wife.

14 And your next strongest is a committed couple.  
15 Maybe they're not married. But suppose a husband and wife  
16 agree to perform for Vivid. And they had sex and then Vivid  
17 was selling their videos all over the country. Is it still  
18 protected?

19 MR. MURRAY: It's not --

20 THE COURT: Should the -- is the law  
21 unconstitutional as applied to them?

22 MR. MURRAY: Yes, but not because it's private  
23 speech anymore. The -- you go back to the other way.

24 THE COURT: Well how do you draw the line? You're  
25 asking me -- I mean, I can just say Congress got this all

1     messed up, it's unconstitutional. But I think the Third  
2     Circuit would expect me to also have some rational explanation  
3     of where a line could be drawn that is constitutional.

4             MR. MURRAY: And I think it's drawn when it comes to  
5     this branch of overbreadth, it's got to be non-commercial,  
6     it's got to be personal expression shared by one citizen with  
7     another, doesn't have to be a married couple. But that's why  
8     these social networking sites are important because --

9             THE COURT: So it's just one-on-one. One male and  
10    one female? Or could it be two males or two females, but  
11    suppose there were three people involved?

12            MR. MURRAY: As long as it's private, non-commercial  
13    expression by everyday --

14            THE COURT: Okay.

15            MR. MURRAY: -- or everyday citizens who are not --

16            THE COURT: Okay.

17            MR. MURRAY: -- doing it for money, but are just  
18    sharing it with like-minded people, I think that's what the  
19    Third Circuit means when it walks about private conduct.

20            THE COURT: Okay.

21            MR. MURRAY: And you don't have to be married, but  
22    it's -- but it certainly affects married couples. But it  
23    seems to me that -- because think about it, Your Honor, when  
24    you look at these images and you see the millions of people  
25    who are posting personal images of a sexually explicit nature

1 on the websites, not making any money, when you know the  
2 millions of people who are sexting with each other, Skyping,  
3 all the other suggestions, this law applies to them.

4 It absolutely, under the Third Circuit's opinion,  
5 applies to them. And that means that all these American  
6 citizens have to make and keep copies of their ID's, of their  
7 own ID's and of their partners. They have to keep all the  
8 other records.

9 They got to put a label on the image before they  
10 post it. Before they send it on their cell phone. Before  
11 they Skype it to the husband and wife, telling the Government  
12 where the records are that can be found that the Government is  
13 entitled to search.

14 And they got to send a letter to the FBI or the  
15 Justice Department identifying the 20 hours per week they will  
16 be available for inspection. That's what this law, as  
17 written, requires. And, yes, it's massively violated. You  
18 won't find any in Plaintiff's Exhibit 37 and 116, you won't  
19 find any of these couples or these individuals who post these  
20 pictures of themselves, who put a label -- they don't know  
21 about it, but it applies to them.

22 And if it's ever enforced and if -- and if the word  
23 ever gets out just how broad this law is, who knows what  
24 American citizens would do. But the point is, the law on its  
25 face as determined by the Third Circuit applies to those many

1 millions of Americans who aren't in it for the money, have a  
2 personal reason to share their images with each other.

3 And it just seems to me, Your Honor, that under the  
4 Third Circuit's test, the statute cannot survive an  
5 overbreadth challenge.

6 Let me turn to the Fourth Amendment for a minute.  
7 We have to begin with the Supreme Court's decision last year  
8 -- last term in U.S. v. Jones. Which held that when the  
9 Government installed a GPS device on the undercarriage of a  
10 Jeep at a time when it was parked in a public lot, and simply  
11 recorded where it went. That was a search that violated the  
12 Fourth Amendment.

13 And the Government argued it didn't even implicate  
14 the Fourth Amendment, because the defendant there they said  
15 had no reasonable expectation of privacy in either the area of  
16 the Jeep, which didn't even belong to him, it belonged to his  
17 wife, where they put the device.

18 Nor did he have any reasonable expectation of  
19 privacy in where that Jeep went on the public roadway. The  
20 Court rejected that, and said it didn't have to even reach  
21 that issue, because it was sufficient that the Government  
22 intruded on an occupied private property for the purpose of  
23 obtaining information.

24 And if you do that, whether you have a reasonable  
25 expectation of privacy or not, the Fourth Amendment applies,

1 and the warrant and probable cause requirement applies.

2 Now, here, in every single instance of the 29 of the  
3 -- actually there might have been one where because the guy  
4 was overseas, the records were mailed in. But 28 inspections,  
5 the Government agents, under the authority of a Federal  
6 Statute and regulations, occupied and intruded upon private  
7 premises, and acquired physical possession of private records  
8 that they didn't own, for the purpose of obtaining  
9 information.

10 According to Jones, that's a search. According to  
11 Jones, the Fourth Amendment applies. They did it without a  
12 warrant, without probable cause. They made copies of these  
13 records. They clearly -- they took photographs of the inside  
14 of these places. They occupied these places for many hours.  
15 And you can't escape the fact, it seems to me, that under  
16 Jones, that, by definition, is a search.

17 And unless the Administrative Search Exception  
18 applies, which I'll get to momentarily, they needed a warrant,  
19 and they needed probable cause.

20 Now -- and, you know, they made -- they made much  
21 mention of the fact that in three of the places that they said  
22 that they inspected the records in the reception area, and in  
23 one place in a -- in a larger room.

24 Your Honor, these were not retail stores, these were  
25 business premises, they, to the extent that a member of the

1 public had a limited invitation to come in and ask the  
2 receptionist, can I see so-and-so, or I have some business to  
3 transact, these agents weren't acting as members of the  
4 public.

5 No member of the public could have come in and said  
6 under color law, I demand that you provide me a place inside  
7 your premises where I can examine your business records, even  
8 though I have no connection to you.

9 Logee Sales (phonetic) the Supreme Court's decision  
10 in 1979, and we'll give you the citation in the brief, or  
11 actually I can give it to you right now, Your Honor. Even a  
12 retail store does not give up its constitutional rights to  
13 privacy, and that was the case where the town justice went in  
14 and there was a warrant.

15 The warrant turned out to be bad, and the Government  
16 says, well, wait a minute, there was no reasonable expectation  
17 of privacy in a retail store anyway. And the Supreme Court  
18 said, no, no, no, no. The town justice and the police were  
19 not there as customers, they didn't pay for watching the films  
20 -- it was an obscenity case -- and so they didn't give up  
21 their reasonable expectation of privacy.

22 But these weren't retail stores. If you look at  
23 every photograph in Plaintiff's Exhibit 32, it's all there.  
24 There's no place that they occupied that wasn't a place that  
25 was private and not available for any John Doe to walk in and

1 just sit there.

2 It just -- the pictures are truly worth a thousand  
3 words each in this case. And, remember, they inspected at no  
4 fewer than six homes or residences. Out of the 28  
5 inspections, six of them were done at home. And they took  
6 possession of private records. And Special Agent Lawrence  
7 admitted, without any qualification, that without the  
8 authority of 2257 to enter without delay and inspect the  
9 records, the only way the FBI could have done what they did  
10 was by getting a search warrant.

11 Now as Your Honor pointed out, once they got a  
12 search warrant, they might have been able to be a little bit  
13 more heavy-handed than they were. They could have worn their  
14 raid jackets.

15 But he admitted that they couldn't have accomplished  
16 what they did without a search warrant, if it weren't for  
17 2257. There was a clear expectation of -- reasonable  
18 expectation of privacy in these records. They recorded the  
19 name, address, alias's, nicknames of all the performers.

20 There had to be attached to it a copy of the image.  
21 In a sense, what we're talking about is, a list of the names,  
22 addresses, date of births and nicknames of their employees.  
23 The people that they employed. Any business would regard a  
24 list of its employees as a private business record.

25 There's a Sixth Circuit case McLaughlin v. Kings

1 Island, 849 Fed 2d 990, Sixth Circuit (1988). OSHA form 200,  
2 required to be completed by employers on a Government form.  
3 They had a reasonable expectation of privacy in it. And they  
4 cite a whole bunch of cases where, even in the case where the  
5 records that are maintained are required by some statute, it  
6 still satisfies the reasonable expectation of privacy test.

7 And the Sixth Circuit struck down a regulation that  
8 permitted a warrantless inspection of the form 200. It's a  
9 case almost right on point, except that in our case we have  
10 First Amendment implications as well.

11 Third party record keeper doesn't cure the problem,  
12 Your Honor. First of all, very few people are using them.  
13 And there's good reason for that, and that's because they're  
14 costly, but more importantly, as we saw, the regulation says  
15 that if -- it doesn't exempt the producer from criminal  
16 liability, if the record keeper who's the third party makes a  
17 mistake.

18 And so people are afraid to do it. And, remember,  
19 there's not a scienter requirement for the prohibition for the  
20 first part of the Statute. 2257(f) says:

21 "It shall be unlawful, (1) for any person to whom  
22 subsection (a) applies..."

23 That's the record keeping requirement.

24 "...to fail or create..."

25 Excuse me.



1 "...to fail to create or maintain the records as  
2 required by the law or any regulation."

3 Every other provision, the next three provisions  
4 requires knowingly to do something. But if you don't keep the  
5 records properly, in the first place, that's it. They don't  
6 even have to prove that you knowingly didn't keep the records.  
7 And so they're not going to take the chance of subjecting  
8 themselves to criminal liability. In any case, it's still an  
9 invasion of the Fourth Amendment, because in that case it's  
10 the producer's agent.

11 And so all that happens is if they go into the  
12 private premises of the third-party custodian, they're not  
13 only violating the producer's Fourth Amendment rights by going  
14 into its agent's premises, they're also violating the  
15 third-party record keeper Fourth Amendment rights.

16 And of course it's the producer's records that are  
17 being examined. So -- and the last thing is, you know, it --  
18 if it were an answer to the Fourth Amendment problem, that if  
19 you didn't want the Government to be able to search your home  
20 or your premises for particular objects or records, you could  
21 avoid that result by giving custody to them to some third  
22 party.

23 That would be the effect of upholding this under the  
24 Fourth Amendment. So it's just no answer. Finally, Your  
25 Honor, the administrative search exception clearly does not

1     apply. We have Judge Rendell's concurring opinion, which lays  
2     out the test.

3             The majority did not in any way disagree with her  
4     analysis. All the majority said was, okay, but since we were  
5     on a motion to dismiss, let's wait and see what the record  
6     shows before we totally decide that the administrative search  
7     exception doesn't apply.

8             But there's no evidence to overcome the two points  
9     that Judge Rendell made. Number one, this is not a closely  
10    regulated industry. It's actually no industry at all, when  
11    you think about the breadth of the coverage, and who all is  
12    covered by this Statute.

13            But even if it were limited to the adult industry,  
14    that's not a pervasively regulated industry. And one of the  
15    reasons it isn't is because of the First Amendment. The First  
16    Amendment imposes many limitations on the regulation of this  
17    industry that are not imposed upon the regulation of other  
18    industries.

19            And the industries that they're talking about are  
20    mines, and junkyards, and places like that. So we're not a  
21    closely regulated industry here. And, furthermore, they have  
22    to show, even if it were, that a dispensing with the warrant  
23    requirement is necessary or essential to the regulatory  
24    program.

25            And Your Honor asked the perceptive questions on

1 that one of both agents. Do you really need to be able to  
2 come in without the advance notice that you might require of  
3 you use some other process?

4 And they said no. There's no risk that the records  
5 are going to be destroyed. That doesn't do -- that's the  
6 worst thing somebody could do. Nor is there any risk that  
7 they could manufacture records on short notice that weren't  
8 there.

9 And I think it was Agent Joyner who said the most  
10 that could happen is that they might clean up their records a  
11 little bit. And he says that would be a wonderful result,  
12 because that's what they want.

13 So it's impossible for the Government to argue that  
14 they could meet that element of the administrative search  
15 question. And, finally, the ripeness and standing arguments  
16 that the Government continues to make fall for all of the  
17 reasons outlined in your order of December 5th, 2012 on the  
18 exact same set of facts that we're presented with on this  
19 record.

20 They've given us no new evidence. It was all in  
21 that motion. They have the affidavit explaining how many  
22 searches, when they stopped, why they stopped, the fact that  
23 there's no new program. And I won't repeat it, because it's  
24 all in Your Honor's opinion. But in each and every instance  
25 Your Honor pointed out the heavy burdens that remain.

1           That give us standing and ripeness.

2           THE COURT: Mr. Murray, you've got five minutes  
3 left.

4           MR. MURRAY: Okay. So I'll finish up and save four  
5 minutes for rebuttal. If I can. But --

6           THE COURT: Okay.

7           MR. MURRAY: -- the one last point I'd want to make  
8 on the ripeness is that, if you look at the reg, the current  
9 reg and the one that was in effect in '05, they're identical,  
10 except for little word changes that really were done to  
11 correct grammar and syntax.

12           The current reg on how you conduct the inspections,  
13 is in all virtual respects identical to the reg that was in  
14 effect in '05. And if you read that reg, they have to do it  
15 the same way. It's not like they can come up with a brand new  
16 idea. If they follow the reg, they would do virtually the  
17 same thing that they did.

18           Because the reg lays out all of the things that they  
19 did, and commands them to do it. So we're talking about, you  
20 know, when they decide to reinspect, and our people have to be  
21 available 20 hours a week, they'll do it exactly the same way.

22           So just, Your Honor, we would request that you  
23 declare -- this is a declaratory judgment, and injunction, but  
24 we certainly believe we're entitled to a declaration that the  
25 statutes and regs are unconstitutional under both the First

1 and Fourth Amendments. And we also think we're entitled to an  
2 injunction against their enforcement. Thank you.

3 THE COURT: Thank you. All right. Ms. Wyer?

4 MS. WYER: May it please the Court. Your Honor no  
5 one here disputes the fact that sexually explicit images of  
6 adults can be protected expression under the First Amendment.  
7 But that is not the question in this case.

8 The requirements that plaintiff's are challenging do  
9 not ban these images that they're talking about. And instead,  
10 all that they do is regulate those who choose to use actual  
11 human beings in creating those images.

12 In doing so, 2257 serves as a prophylactic measure  
13 to prevent the creation of child pornography. Which as Your  
14 Honor -- in this posture, Your Honor's questions, every  
15 plaintiff in this case has affirmed that they abhor. And to  
16 put these requirements in place in a way that there is means  
17 of finding age verification records for a film, for example,  
18 once that film -- once the creator of that film releases it  
19 out into the world, and it travels further down the  
20 distribution chain.

21 As Your Honor has recognized, there are a limited  
22 number of issues remanded to this Court for factual  
23 development, and I will go through the as applied and facial  
24 First Amendment claims and as applied Fourth Amendment claim.  
25 I first want to note, starting with the as applied First

1 Amendment claim, that is the only claim where the narrow  
2 tailoring issue is part of the analysis. There is no narrow  
3 tailoring prong in the overbreadth analysis.

4 So the Third Circuit's remand on the as applied  
5 First Amendment claim was very narrow. It recognized already  
6 that the 2257 requirements directly advanced the Government's  
7 important interest, and it did not invite this Court to  
8 revisit that issue.

9 Under the narrow tailoring analysis, Mr. Murray  
10 mentioned the question that the Third Circuit asked relating  
11 to the relative ages of the performers. And for ease of  
12 analysis, these plaintiffs can be broken into three groups.  
13 First, there are the adult industry plaintiff's, which include  
14 Free Speech Coalition, Sinclair Institute, Marie Levine and  
15 Thomas Hymes.

16 Second are the photographer, what you could call the  
17 photographer plaintiffs, which include American Society of  
18 Media Photographers, David Steinberg, Barbara Nitke, Barbara  
19 Alper and David Levingston.

20 Finally, there are the plaintiffs who claim to be  
21 engaged primarily in an educational activity, which consists  
22 of Betty Dodson and Carla Moss, and also Carol Queen.

23 Now starting with the adult industry plaintiffs, I  
24 think the Court properly recognized that the burdens that  
25 those plaintiffs might face due to 2257 compliance are not

1     terribly significant when you take into account that they are  
2     clearly engaged in commercial production of sexually explicit  
3     expression, and compliance with these requirements is a  
4     justified cost of doing business when your business involves  
5     filming individuals engaged in sexual acts.

6             In addition, we have heard testimony that the  
7     performers in this industry are predominantly youthful. The  
8     evidence regarding specific plaintiffs only confirms that none  
9     of these plaintiffs -- when you look at the Third Circuit's  
10    opinion on narrow tailoring, what you see is the Third Circuit  
11    was asking the question whether an exemption could be created  
12    for a particular plaintiff on the basis that that plaintiff  
13    employs performers that no reasonable person could conclude  
14    were minors.

15            And what it was looking at are the previous opinions  
16    in other cases that identified as a possible exception to the  
17    universal application of the requirements, something like an  
18    illustrated sex manual for the elderly, where it's a product  
19    that only uses individuals who could not be confused for  
20    minors.

21            So that kind of thing could be taken out of the  
22    whole 2257 regulatory scheme. But none of the plaintiffs in  
23    this case present an elderly sex manual situation. The Court  
24    was correct in recognizing in its findings that even Sinclair  
25    Institute, which purports to be educational, uses a

1 significant number of youthful looking performers in its  
2 videos.

3 And the numbers that we saw were over 20 percent  
4 were 25 or younger, and 34 percent 29 or younger. And the  
5 titles of these videos, as Your Honor recognized, show an  
6 intent to draw those seeking sexual titillation, and used  
7 terms such as teen porn, that appeared to be drawing in  
8 individuals who are looking for young looking performers.

9 The other Free Speech Coalition members that  
10 plaintiffs identified, also show use of young performers. The  
11 Free Speech Coalition identified David Connors as one of its  
12 members. And 47 percent of the performers he identified are  
13 25 or younger. Vivid Video, which plaintiffs mentioned, 41  
14 percent of the performers were 25 or younger.

15 And so it may not be a majority, it may not be 60  
16 percent, but it is a significant enough amount that it is  
17 definitely not in the elderly sex manual category. And that  
18 was the category that I think the Third Circuit was really  
19 looking at.

20 Marie Levine, 24 percent were 25 or younger, and 40  
21 percent were 29 or younger. And Thomas Hymes is also part of  
22 the adult industry on the media side.

23 For Thomas Hymes, I think the Court should look at a  
24 jurisdictional issue. Because Mr. Hymes makes -- had wanted  
25 originally back in 2009, to create the Daily Babylon website,



1 but since that time he really has not actively maintained that  
2 website.

3 And that -- it has nothing to do with 2257, it's  
4 simply because he -- his career just didn't go the way he  
5 wanted, and he's back working 60 or 70 hours at AVN, and he  
6 simply has not time at this point to be involved in that  
7 website, in the way that he had wanted.

8 Mr. Hymes also presents a situation which I think  
9 really carries across all of the plaintiffs, where he has no  
10 way of predicting what ages of performers he might use in the  
11 future. He has never -- he has never been a producer of  
12 sexually explicit images before.

13 He doesn't know what performers he might want to  
14 include in images that he uses -- might use in the future to  
15 illustrate his articles.

16 So it's not-- so going back to the standard of the  
17 elderly sex manual situation, you'll also have to take into  
18 account that it's not simply a question of looking at the data  
19 of the ages of performers that were used in the past, you also  
20 have to look at the nature of the work, and whether the ages  
21 can be cabined in some way that you have some way of  
22 predicting with certainty that that is the age that is going  
23 to be used in the future.

24 So we have these numbers for these adult industry  
25 plaintiffs, which show a substantial number of young looking

1 performers, and there's no way of predicting whether that  
2 number might not increase in the future.

3 But all of these plaintiffs have confirmed that they  
4 have nothing against using young looking performers, they're  
5 to trying not to use young looking performers. So, again,  
6 this is a very different situation from the elderly sex manual  
7 category.

8 Now turning to the photographer plaintiffs. In  
9 regard to the ASMP and its members, the Court correctly noted  
10 that even if we fully credit ASMP's survey results as  
11 identifying 400 out of 7,000 ASMP members who take sexually  
12 explicit photographs, that is a very small percentage of  
13 ASMP's total membership.

14 But the numbers could be even more, because the  
15 actual question that was used in the survey is not in the  
16 record. And nor are the survey results. We simply do to know  
17 what the respondents might have -- what question they were  
18 answering, or what they were thinking when they responded to  
19 that survey.

20 Or whether their images even fall under sexually  
21 explicit depictions that would be subject to 2257. Looking --  
22 Mr. Mopsie (phonetic) testified in this case, but he  
23 identified no more than a handful. He certainly didn't  
24 identify 400 ASMP members who were engaging in works showing  
25 sexually explicit conduct subject to 2257. And on the whole,

1 such photographers, I think Mr. Mopsie acknowledged, did not  
2 share any particulars defining characteristics, aside from the  
3 fact that they photograph real people engaged in sexual acts,  
4 or lascivious display of the genitals.

5 And, indeed, Mr. Mopsie acknowledged that some ASMP  
6 members today are likely members of the adult industry, and  
7 who -- category of working photograph, which is ASMP member  
8 definition, overlaps with the adult industry category.

9 Adult industry film makers can be and may be in the  
10 future become members of ASMP. The only member of ASMP  
11 actually identified as an exemplar of a photographer subject  
12 to 2257, other than Barbara Alper, is Craig Morey.

13 But Morey himself is a perfect example of the  
14 overlap between photography, on the one hand, and pornography  
15 on the other.

16 Mr. -- if you look at evidence submitted into the  
17 record about Mr. Morey's website, you see that at -- so  
18 residents paid memberships to the website in order to view  
19 images of young female models in erotic poses showing genitals  
20 and engaging in masturbation.

21 It's hard to distinguish what you see on that  
22 website from what you see on a website like Marie Levine,  
23 which has the very same structure of membership in order to  
24 look at images.

25 And I'll get to the age breakdown in a minute for

1 that. We heard from David Steinberg that, regardless of a  
2 photographer's intent in taking an image, there's no objective  
3 criteria that distinguish what might be considered art, from  
4 what might be considered mainstream pornography.

5 There's no way to define a category, if you were  
6 trying to carve out a category of material that could be  
7 exempted. But it's impossible to do that just by saying, it's  
8 art.

9 And of course we know that the artistic, or  
10 journalistic, or educational nature of an image has nothing to  
11 do with whether that image qualifies as child pornography.  
12 It's simply the age of the performer that's the relevant and  
13 determinative factor.

14 It's also clear from the record and the evidence we  
15 heard, that fine art photographers are, like Barbara Alper,  
16 Barbara Nitke, and David Steinberg, are engaged in commercial  
17 activity when -- not only in other photography that they do,  
18 but also when they are making their art.

19 We heard evidence that Barbara Alper has sold her  
20 work -- her art work to magazines, to museums, and to  
21 libraries. And David Steinberg and Barbara Nitke have  
22 published books of their works. David Remington and others  
23 have exhibited in galleries. And the rule when you exhibit a  
24 work in a gallery is that that work is for sale, and the  
25 artist certainly hopes that that work will be purchased.

1           And when Barbara Alper, which Your Honor identified  
2           as the only plaintiff who had engaged in any kind of private  
3           acts -- photographic or production activity. When she  
4           photographed herself and her future husband engaged in sexual  
5           activity, she also ended up selling some of those images to  
6           the Norwegian Magazine Cupido.

7           So none of these photographer plaintiffs are  
8           engaging in non-commercial conduct when they're making their  
9           images that are subject to 2257.

10          Now focusing on the Third Circuit's question in  
11          regard to the photographer category. The evidence, again,  
12          does not demonstrate that any of these photographs fall into  
13          the adult sex manual category, or use only obviously mature  
14          models.

15          And going back to the question of what obviously  
16          mature means. I think the evidence in this case establishes  
17          that 25 is not any kind of a magic number when it comes to who  
18          might be considered obviously mature.

19          We have heard from Dr. Linz, who acknowledged that  
20          people over 25 could also be confused as minors. We've heard,  
21          as we'll point out more clearly in the briefing, we heard  
22          Carlin Ross talk about that photograph where the young --  
23          where the man is -- that Dr. Biro also discussed that the  
24          Irish looking man with the Irish passport in that photograph,  
25          she identified that individual as 17 years old.

1           In fact, we know from the evidence that we've gotten  
2           that that individual was 28 years old. So someone as old as  
3           28, we know from the evidence we've heard here, that a  
4           28-year-old can be confused with someone under 18.

5           And Dr. Biro said that the range of confusion can be  
6           extended based on the attempts that the individual makes to  
7           make himself or herself look younger or older.

8           So when we're talking about who is obviously mature,  
9           there's no magic cutoff number there. So going through the  
10          plaintiff in the photographer category. We have in the record  
11          evidence that plaintiff has provided about Craig Morey, who is  
12          the only ASMP member that we have seen in -- that we really  
13          have any information about, other than Barbara Alper.

14          He, as I mentioned, produces photographs that a  
15          large number of very youthful looking females, and 61 percent  
16          of the sample were individuals aged 25 or younger, and 87  
17          percent were 29 or younger.

18          And we actually heard Dr. Biro testify this morning  
19          about how youthful those individuals appear. Now looking at  
20          Barbara Alper's work, we heard her discuss how she does her  
21          art work projects and stages, and her current project Smooth  
22          Hotel primarily uses models in their early twenties. I think  
23          only one of the individuals that she provided information  
24          about in that project is over 25 or 26.

25          And a sample including some of her earlier works

1 shows that 35 percent of those individuals were 25 or younger,  
2 and 45 percent were 29 or younger.

3 Dr. -- David Steinberg's photo shoot charts, Mr.  
4 Linz mentioned it does include individuals as young as 19.  
5 And when you're looking at images in the way that David  
6 Steinberg is photographing, when there's often couples, he's  
7 photographing couples having sex. So I think it's significant  
8 to point out that there are many instances going through the  
9 photo shoot list where you can see that even though one half  
10 of the couple is older, the other half is significantly  
11 younger.

12 So you see a 37 year old with a 19 year old. A 39  
13 year old with a 25 year old. And a 73 year old with a 25 year  
14 old.

15 For David Levingston, the information we received  
16 has led to the result that 44 percent of his nude models were  
17 25 or younger, and 60 percent were 29 or younger.

18 And, again, the same -- the same caveat applies, in  
19 that none of these photographer plaintiffs suggest that they  
20 would limit the ages of performers in future work to some  
21 higher cutoff point than 18.

22 Barbara Nitke acknowledged that, after she finishes  
23 her cinema projects, she doesn't know what her future project  
24 will be. So I think -- so it would be difficult to  
25 extrapolate based on what she's done in the past, what age

1 range of individuals will appear in her future projects.

2 David Steinberg has acknowledged that he would not  
3 -- he would not refuse to photograph an 18 year old couple  
4 engaging in having sex, if he had the opportunity to do so.  
5 And David Levingston testified that the work that he  
6 anticipates might be subject to 2257, if he had -- if he were  
7 less careful about the poses that his models engaged in.

8 These would be the same models that he's already  
9 photographing in those -- so, again, we don't know for certain  
10 what age range of models he might use. And Barbara Alper has  
11 admitted that she does not know what the ages of the  
12 individuals that she might photograph on Fire Island.

13 Now the category that I mentioned, the educators.  
14 To a large extent, it should be noted both Dodson and Ross,  
15 and Carol Queen, are seeking to raise an anonymous speech  
16 claim on behalf of third parties who they believe -- they are  
17 trying to encourage to send in, or participate in activities  
18 involving images of sexually explicit conduct, such as Dodson  
19 and Ross's Genital Art Gallery and Carol Queen's Masturbate-A-  
20 Thon.

21 But the question of third parties' interest in  
22 engaging in anonymous speech is not properly before the Court  
23 on remand, because the Third Circuit has already disposed of  
24 that claim in its opinion.

25 The question also considered that with respect to



1 Carol Queen there is also a standing issue that still needs to  
2 be analyzed. Because Carol Queen testified that she has not  
3 -- she's not recorded the Masturbate-A-Thon for the past three  
4 years, and that has nothing to do with 2257.

5 Again, it's simply because she is not using a venue,  
6 perhaps she feels that is practicable to divide up the space  
7 to have part of the space have a live streaming component.  
8 She also acknowledged that the photo club that she describes  
9 is inactive, and she is not engaging in artwork, she has not  
10 participated in artwork that she described for the past one  
11 and a half years.

12 And all of these individuals, again, have testified  
13 that they do not restrict ages of the participants in the  
14 Genital Art Gallery, or the Masturbate-A-Thon, on any other  
15 component of their work.

16 Again, this is simply not an elderly sex manual  
17 situation. Somewhat unrelated to the ages of individuals  
18 appearing in their work, all of the plaintiffs that we have  
19 seen here have attempted to identify burdens associated with  
20 2257 compliance.

21 But the burdens they have identified do not entitle  
22 any of these plaintiffs to an exemption from the requirements.  
23 Again, the -- we agree with the Court's assessment --

24 THE COURT: Okay. Well what -- let me ask you about  
25 the husband and wife situation. Now I know you argued in the

1 Third Circuit that this Statute was not intended to apply to  
2 them, and that issue should be ignored.

3 But the Third Circuit, referring the adoption of  
4 constitutional avoidance, acknowledged your argument, but  
5 rejected it. What do you think I should do now that we have a  
6 factual record? Do you suggest that I can revisit that, or I  
7 should continue to ignore it? Mr. Murray says the fact that  
8 it applies, shows that it's overbroad per se, to -- that it  
9 applies to husband and wives.

10 If they were to transmit to each other on a cell  
11 phone and they don't comply with 2257, that's a crime. Now  
12 you argued three years ago that that's -- that I should ignore  
13 it, that it should be products for sale.

14 You argued again in the Third Circuit, they clearly  
15 rejected your issue. What do I do about that?

16 MS. WYER: Okay, Your Honor. Yes. Well the -- I  
17 was trying to address the as applied question in that claim,  
18 so in regard to that issue, it's significant that there is no  
19 plaintiff in this case raising an as applied claim on the  
20 basis that they are --

21 THE COURT: But you're saying this is an as applied  
22 claim, or an overbreadth claim?

23 MS. WYER: Well I'm saying that in this case it  
24 cannot be viewed as an as applied claim, because there's no  
25 plaintiff with standing to raise such a claim, and there's no

1 plaintiff who claims to be raising such a claim.

2 THE COURT: Well I think Barbara Alper raised it.  
3 She said this was a -- this man -- that before they were  
4 married they had sex that they transmitted images, and they  
5 continued to do it after they got married.

6 MS. WYER: Well I think the answer to that is that  
7 her -- she doesn't stand as a individual who is raising that  
8 as a basis for her as applied claim, she's --

9 THE COURT: But she is. But she's raising it. Mr.  
10 Murray -- wait a minute. Mr. Murray, as counsel, he's raised  
11 -- he's taking that testimony, and he's saying that shows how  
12 this is overbroad, whether its facial or as applied, either  
13 way, or both. Now what is your answer?

14 MS. WYER: I think that claim is not in the  
15 complaint.

16 THE COURT: And you -- if you'd rather brief it,  
17 that's fine. But this is an issue I need to know the  
18 Government's position on.

19 MS. WYER: Well, first of all, I would say that that  
20 claim, an as applied claim based on being a member of a  
21 private couple, is not in the complaint, it's never been  
22 identified until --

23 THE COURT: Wait, wait. But you raised it on  
24 appeal, the Third Circuit rejected your -- and now we have  
25 testimony.

1 MS. WYER: That was in the context of the  
2 overbreadth, so that was in the context of overbreadth. So I  
3 will address that question in regard to overbreadth. And the  
4 answer is, what we would say is that it should wait for an as  
5 applied challenge by someone who is actually raising that  
6 claim.

7 I don't think that claim is properly before the  
8 Court as an as applied challenge in this case. In regard  
9 to --

10 THE COURT: Well you would agree that I'm bound by  
11 whatever the Third Circuit said. I mean, you could have asked  
12 for certiorari, but you didn't, so I'm -- so I'm bound by that  
13 rule.

14 MS. WYER: In regard --

15 THE COURT: By that holding. Yes.

16 MS. WYER: That doesn't require a particular result.  
17 I think what is significant there is that an overbreadth  
18 claim, that rationale -- rationale for an overbreadth claim is  
19 the idea that it would chill third parties not before the  
20 Court.

21 And the Court -- so the significant point there is  
22 that we have heard testimony from Agent Lawrence, for example,  
23 who has acknowledged that there is no way that people who are  
24 engaging in truly private conduct, like a private couple  
25 making a home video, or engaging in sexting, or a truly

1 private communication, there's no evidence that that activity  
2 has been chilled, for one thing. And there's no reason to  
3 expect that that activity is being chilled, or would be  
4 chilled.

5 And so the rationale, the underlying rationale for  
6 an overbreadth claim does not justify a holding the Statute  
7 facially invalid just on the basis of this private activity.  
8 And any overbreadth has to be measured against the plainly  
9 legitimate speech of the Statute.

10 And the overbreadth -- that's why I mentioned before  
11 that it's the plaintiffs that have the burden to establish  
12 overbreadth, because overbreadth means that you're striking  
13 down a law, you're leaving nothing standing in regard to this  
14 law. You're making it invalid as applied even to perfectly  
15 legitimate applications like the entire adult industry would  
16 then be relieved from checking driver's licenses, if this law  
17 is struck down.

18 So I think that -- the plainly legitimate sweep of  
19 the statute has to be taken into account when you're trying to  
20 assess whether, even under the Third Circuit's interpretation,  
21 whether the -- whether the existence of private couples making  
22 home videos justifies striking down this law on its face.

23 And in terms of quantification, we have --

24 THE COURT: Well you're correct, in that that  
25 argument -- that holding of the Third Circuit was in

1 connection with the narrow tailoring issue. Not the facial  
2 overbreadth.

3 MS. WYER: But I think it's overbreadth.

4 THE COURT: Go ahead. What?

5 MS. WYER: Isn't it overbreadth?

6 THE COURT: No. It's on page 30 and 31 of the slip  
7 opinion, which is where they're talking about as applied and  
8 narrow tailoring. Well I think both of you ought to address  
9 that in your briefs. Go ahead.

10 MS. WYER: Okay. So well I'll just -- well, okay,  
11 I'll come back to this --

12 THE COURT: You've got 15 minutes.

13 MS. WYER: Okay. I'll -- I will -- I guess I will  
14 address the issue of the burdens in briefing, and I'll go onto  
15 overbreadth.

16 I did just want to mention in regard to some of  
17 these requirements, the plaintiffs, some of the burdens that  
18 they are describing are not burdens that the Statute or  
19 regulations are imposing. It's based on their  
20 misunderstanding of the requirements.

21 So, for example, the labeling requirement, there's  
22 nothing in the Statute or regulations that requires -- I think  
23 a fair reading of those requirements would not lead one to  
24 have to attach a label to an image at the very instant that  
25 it's created.

1           And there has to be some assessment of, when does  
2           that image -- when does that label have to be attached? And  
3           the rational interpretation of that is, because the labeling  
4           requirement is what tells people where the records are located  
5           once that production is sent out into the world.

6           The requirement attaches at the point when the image  
7           goes outside the producer's control. So it doesn't mean you  
8           have to, as soon as you snap the shutter on a digital camera,  
9           but obviously it would be impossible to attach a label at that  
10          very instant.

11          So there has to be some way of taking commonsense  
12          and reality into account when you're interpreting that. It  
13          doesn't mean that the regulation is invalid, simply because  
14          you can imagine some absurd way of applying it that is  
15          physically impossible.

16          So going to overbreadth, the Third Circuit's  
17          identified two possible -- two factual questions for this  
18          Court to look at. One of those has to do with the ages of the  
19          individuals appearing in sexually explicit images, and then  
20          the other one has to do with private depictions.

21          And in both of those instances, as I was explaining,  
22          the -- the other side of the question is the plainly  
23          legitimate sweep of the Statute. And here the plainly  
24          legitimate sweep of these requirements is vast. We agree with  
25          the Court's view that there is -- that the evidence that has

1     been presented shows a strong demand for very youthful looking  
2     performers in sexually explicit films and videos.

3             We have testimony from Gail Dines (phonetic) that  
4     teen porn is a very popular category in pornographic  
5     compilations and sites. We have Daniel Linz -- plaintiffs  
6     expert Daniel Linz, acknowledging the same thing. And we have  
7     presented the Court in the evidence that we presented, the  
8     screen shots that we presented bolster and confirm what Gail  
9     Dines' testified, that it's not only in categories that are  
10    identified as teen porn where youthful looking performers  
11    appear.

12            Even in a category labeled, MILF, Gail Dines  
13    testified about the scenarios, and in those kinds of videos  
14    where it's a mother with a daughter's boyfriend, or, I don't  
15    remember the other one, but it involved something where an  
16    older woman, in most cases, is with a younger man, or vice  
17    versa.

18            And so that category is not somehow removed from the  
19    plainly legitimate sweep of the Statute, that category is part  
20    of the plainly legitimate sweep the Statute, because the  
21    prevalence of youthful looking performers transcends across  
22    virtually every group of sexually explicit images on the  
23    internet.

24            THE COURT: You have ten more minutes.

25            MS. WYER: Plaintiffs, again, may have proposed --



1     there seems to be some thought of a cutoff age. But as I was  
2     mentioning, 25 is not a magic number. And no plaintiff - it's  
3     significant, I think that no plaintiff has testified that the  
4     requirements would be less burdensome if there was a cutoff  
5     age, such that the requirements applied only to some of their  
6     work and not all of it.

7             And in the universe -- the question of whether the  
8     plain legitimate sweep of the Statute also has to take into  
9     account the relative burdens of having a universal  
10    requirement, versus trying to introduce the subjectivity that  
11    would be involved if you try to establish a cutoff age based  
12    on the appearance of how someone looks when you take their  
13    picture.

14            Is it really easier, or less burdensome to try to  
15    figure out in every instance whether someone is a certain age,  
16    such as 25, and you -- we heard Agent Lawrence testify that  
17    having a cutoff date like that would actually do nothing,  
18    other than lead to case-by-case disputes, and make the whole  
19    process he -- as he put it, gum the whole process up.

20            Because you would constantly be having this question  
21    about, does the picture make someone look a certain age? Do I  
22    think that person is a certain age? Well will the inspectors  
23    think that that person is that age? So it introduces numerous  
24    levels of complexity and subjectivity into the entire process.

25            What we have now, and what other Courts have

1 recognized as effective is a universal requirement. All that  
2 is required is that you check the ID of everyone. And why --  
3 why introduce additional difficulties and burdens into that  
4 regulatory scheme that is something clear people, can follow  
5 it.

6           There's no -- but I think, while the important point  
7 there is that substantial overbreadth, the categories that the  
8 Third Circuit identified do not rule out, or do not entirely  
9 address what the plainly legitimate sweep is, because if  
10 universal age verification is reasonable, as it is, that means  
11 that the everything encompassed within that universal age  
12 verification is within the plainly legitimate sweep.

13           Going to the private issue. The Third Circuit's  
14 question on the private issue. The point to make there is  
15 that plaintiffs have introduced, have tried to encompass  
16 within their category of private communications, things that  
17 do not -- that should be subject to the requirements, because  
18 they are not truly private, and they are not -- there's no  
19 evidence about what percentage of that material is even  
20 non-commercial.

21           All of these dating websites, all of these social  
22 networking sites, those are locations where publicly available  
23 images are posted to the internet. And when something is  
24 posted to the internet, our position is that that is not  
25 private. That is exactly why the requirements legitimately

1     apply.

2             And the -- again, should try --

3             THE COURT: Yes. But does that apply to a mobile  
4     communication? And, you know, a Face Time between a husband  
5     and wife or --

6             MS. WYER: Well that is -- I think that is not -- I  
7     mean, this is purely hearsay --

8             THE COURT: I mean, I understand your argument about  
9     the --

10            MS. WYER: -- evidence --

11            THE COURT: -- internet, and that has some logic to  
12     it. But what do you do about -- look, this whole -- what the  
13     plaintiffs call sexting, or even just a message, a mobile  
14     message between a husband and a wife. That technology did not  
15     exist when the Statute was passed, or I think the regulations.  
16     Now what do I do with the plaintiffs' argument about that?

17            MS. WYER: About that, I think the answer is to wait  
18     for an as applied challenge from someone who is seeking to  
19     engage in sexting, and feels -- has some claim to feel  
20     chilled.

21            Again, I think this falls within the situation where  
22     there's no evidence of any chill. There's no -- there's no  
23     reliable quantification of that activity.

24            We don't have any -- we have not seen a single sext  
25     in this case. The definitions of the things that Drouin and

1 Zimmerman were trying to measure included cleavage. Cleavage  
2 is not even subject to the 2257 requirements. And for all we  
3 know all the images --

4 THE COURT: We had some of the actual witnesses, I  
5 think, testify to, you know, their sending cell phone  
6 messages. Am I wrong about that?

7 MS. WYER: I don't recall that happening.

8 THE COURT: All right.

9 MS. WYER: I don't recall anything like that.

10 THE COURT: Then I'll make a question mark about  
11 that. All right, go ahead.

12 MS. WYER: Even if one -- even if all of the  
13 plaintiffs testified, that's 12 individuals, that doesn't show  
14 a prevalence of that activity.

15 THE COURT: Okay. Do you want to talk about --  
16 you've got five minutes. Do you want to talk about the Fourth  
17 Amendment, briefly?

18 MS. WYER: The Fourth -- with respect to the Fourth  
19 Amendment, the ripeness issue is a significant issue on that  
20 claim because --

21 THE COURT: So you think that's alive, even though I  
22 denied your motion to dismiss?

23 MS. WYER: Yes. Because Your Honor said at the time  
24 that you were denying it when we had the hearing on the issue,  
25 that you would be willing -- that you would revisit that issue

1 later, and I think now is later. So that issue is ripe, so to  
2 speak, for a decision at this point.

3 And the plaintiffs' burden from that stage, that was  
4 the motion to dismiss stage. At the trial stage, their burden  
5 to establish ripeness and standing is greater at this stage of  
6 the case. But --

7 THE COURT: Yes.

8 MS. WYER: -- the photographs that occurred in the  
9 past, there are material differences to even if those  
10 inspections provide a -- actually context for what the  
11 situation was in 2006 and 2007. Now we have -- digital  
12 technology has advanced so much since that time, the scope of  
13 the requirements has changed. Now it applies to lascivious  
14 exhibition of the genitals.

15 In 2007, it did not. And so that brings in a whole  
16 realm of new images. If the -- the number of producers is far  
17 greater than what the FBI thought when it had 300 producers in  
18 its database, by the end of that time it was looking into the  
19 prospect of trying to monitor over a million. And, at this  
20 point, it could be even greater.

21 So what we did see in those inspections were  
22 inklings of how an inspection program might -- might vary in  
23 the future. We have, even then when it was not really  
24 allowed, the agents were not -- did not have a problem with  
25 third party custodians. Now that is an established thing that

1 the regulations allow. And there's no evidence in the record  
2 on how many producers use that.

3 We do know that David Conners uses a third-party  
4 custodian. We know that Marie Levine uses a third-party  
5 custodian. There -- the digital technology, in the Pure Play  
6 inspection that occurred, that -- that's from the producer has  
7 simply downloaded all of its records onto a CD and gave it to  
8 the agents and they took it back to their office to review.

9 When -- now in 2013, or the future when they are  
10 looking at how to implement a new inspection program, if that  
11 ever happens, how do we know? It's pure speculation as Your  
12 Honor has recognized during the agent's questioning.

13 It's pure speculation that the FBI -- whether the  
14 FBI would establish as the way things would happen, that every  
15 time the records are on digital form, just give me a CD with  
16 those records.

17 And Agent Joyner -- what we do know from the  
18 inspections that -- that the evidence shows that the agents  
19 were completely accommodating to the producers at every step.  
20 They did not -- they sat where they were told to sit. They,  
21 if the -- they waited on the threshold of the residence until  
22 they were invited in.

23 Whenever they could not find a producer, they did  
24 not hold anyone to an arbitrary 20 hour per week, you have to  
25 be present, and otherwise you're -- we're going to write it up

1 as a violation. Instead on the occasions when they could not  
2 locate the producer, they made every effort to make  
3 arrangements.

4 They gave advance notice when the situation  
5 required. And there's no basis given those facts and the very  
6 limited nature of the inspections where the -- really the only  
7 object of those inspections were the 2257 records themselves.  
8 And Your Honor's holding in the first round of the case that  
9 there is no expectation of privacy in those records, has  
10 continued to be valid and nothing in the Third Circuit's  
11 opinion questioned that holding.

12 THE COURT: Okay. I think you're done. You have  
13 one more sentence?

14 MS. WYER: Well in sum, Your Honor, we ask the Court  
15 to uphold the validity of --

16 THE COURT: Okay. All right. I want to mention one  
17 issue, and this is -- and I may not be stating this in the  
18 exact proper way. What we faced here with a Statute and with  
19 regulations. Now I know -- I think I know how the Supreme  
20 Court has stated a Court should review a Statute.

21 And also how it should review regulations. And as  
22 far as regulations, we have a very recent case, Arlington,  
23 Texas v. The FCC. Which I've read quickly.

24 So one of the things you may want to address in your  
25 brief, because the regulations, in my mind, have more to do

1 with the Fourth Amendment then the First Amendment, is whether  
2 there's any different standard of review, or construction, or  
3 deference, or anything like that.

4 I would welcome some at least discussion, or stating  
5 your view about that issue. Okay? All right. I want to  
6 thank all of you for being very diligent, and very  
7 well-prepared. You have each represented your clients very  
8 well.

9 This is a fascinating case. It's an important case,  
10 I think. And it's a case that obviously we have spent a lot  
11 of time and energy on, but I think that's what we're here to  
12 do.

13 So I'll look for your briefs. We'll look for the  
14 opening briefs on Friday, June 28th. And we'll look for the  
15 reply -- I would add that, if you can get them filed, say, you  
16 know, like by three or 4:00 that day, or even earlier, that  
17 would be welcome, rather than midnight.

18 But we'll take them when we get them. And then the  
19 reply brief is limited, as I've indicated, will be due on  
20 Friday, July 5th. Okay? All right. So thank you very, very  
21 much. All right. We're in recess, and I'll be back in ten  
22 minutes for the criminal case.

23 (Proceedings concluded at 2:30 p.m.)



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C E R T I F I C A T I O N

I, Josette Jones, court approved transcriber, certify that the foregoing is a correct transcript from the official digital audio recording of the proceedings in the above-entitled matter.

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JOSETTE JONES

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DATE

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